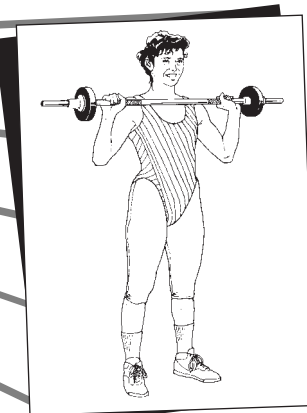
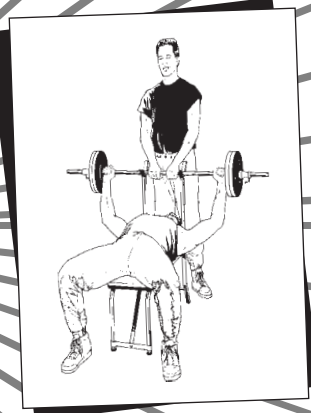
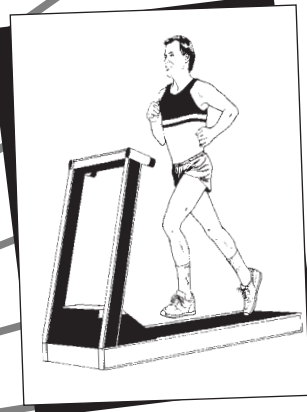
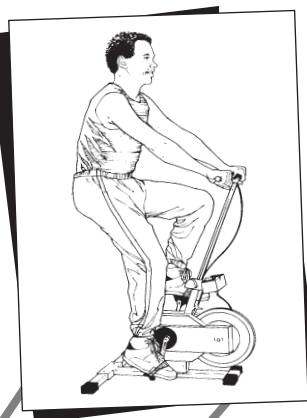


GUIDELINES FOR PURCHASING EXERCISE EQUIPMENT

How to choose fitness equipment that is right for you or your clientele



GUIDELINES FOR PURCHASING EXERCISE EQUIPMENT

How to choose fitness
equipment that is right
for you or your clientele



N.C. GOVERNOR'S COUNCIL ON
PHYSICAL FITNESS AND HEALTH



**NORTH CAROLINA GOVERNOR'S
COUNCIL ON PHYSICAL
FITNESS AND HEALTH**

**"Committed to improving the physical
fitness of all North Carolinians."**

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The Governor's Council on Physical Fitness and Health is a program of the Health Promotion Section in the Division of Community Health of the Department of Health and Human Services.

All questions or comments regarding this guidebook should be directed to the Department of Health and Human Services, Governor's Council on Physical Fitness and Health at 225 N. McDowell St., Raleigh, NC 27603. phone (919)733-9615. FAX (919)715-5719.



DISCLAIMERS

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Any person 35 years of age and older not accustomed to exercise or anyone with previous medical problems should consult a physician before beginning any type of exercise program.

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ACKNOWLEDGEMENTS

The North Carolina Governor's Council on Physical Fitness and Health would like to thank the following individuals for their contributions to the creation and development of Guidelines for Purchasing Exercise Equipment:

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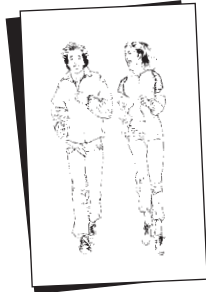
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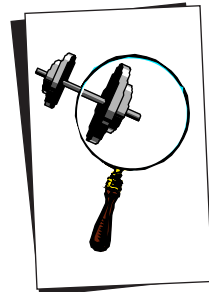
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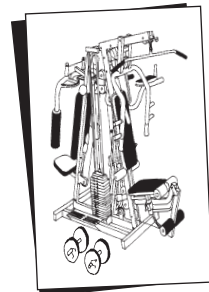
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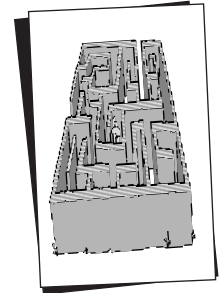
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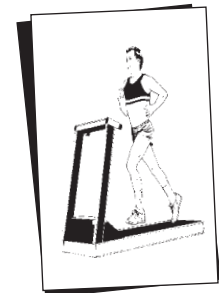
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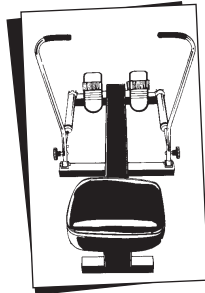
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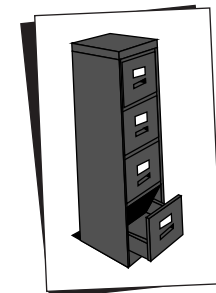
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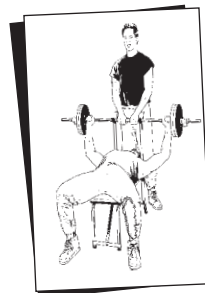
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INTRODUCTION

The idea for this guidebook originated in the Older Adult Physical Fitness and Health Committee of the North Carolina Governor's Council on Physical Fitness and Health. In talking with senior center staff across the state, the committee found that many of them must make decisions about buying exercise equipment without guidelines or experience to rely upon. Further, the committee discovered that few resources exist that provide equipment buying guidelines for people with limited budgets and little knowledge of the equipment.

The Governor's Council on Physical Fitness and Health thus decided to create a document to address this issue. The result is *Guidelines for Purchasing Exercise Equipment*. In addition to senior center directors, the guidebook was designed to assist the smaller worksite wellness coordinators, the home fitness equipment buyers, and anyone with limited experience and financial resources.

This guidebook is not designed for the coordinator of a well-equipped health club or large corporate fitness center, where the equipment gets used by many people each day. These professionals work with relatively large budgets and buy commercial equipment, which is typically higher in quality and price than the equipment described in this guidebook.

The main purpose of the guidebook is to provide some basic ideas to keep in mind when purchasing equipment. We hope these ideas will help the reader purchase equipment that fits his or her needs. Meeting these needs greatly increases the chances that the equipment will be used and enjoyed rather than gathering dust.

A report by the Surgeon General in 1996 stresses the importance of physical activity for our health and well-being. Whether it's working out on a treadmill or simply taking a walk through your neighborhood, I strongly encourage you to make time in your busy schedules for physical activity, and I ask for your help in encouraging others to do the same.



Walter Curl, M.D.
Chairman

North Carolina Governor's Council
on Physical Fitness and Health

January 1998

TARGETING YOUR FITNESS EQUIPMENT NEEDS



Whether you are a home equipment purchaser or buying equipment for facility use, it is critical that your purchase meet your needs. If it does not, you will probably waste your money on equipment that goes unused. It is easier to identify and target your needs if you consider eight factors in purchasing your equipment. These factors include goals, user demographics, simplicity, cost, durability, safety, appeal, space and service/recommendations. By reviewing each of these factors prior to buying, you should have a clear picture of exactly what you need.

GOALS

In determining the equipment to purchase, you should first determine your specific fitness needs. Are you in the market for general fitness or are you interested in rehabilitation? Generally, fitness programs include strength training coupled with cardiovascular conditioning and flexibility.

If you have a specific fitness need, we suggest you consult with a professional fitness trainer, physical educator or fitness specialist. If you plan to rehabilitate an injury or strengthen some particular area such as your back or a

knee joint, a physician or physical therapist can help guide your program and assist with equipment suggestions that suit your condition.

As a purchaser of facility equipment, you must have a clear sense of why your organization is purchasing exercise equipment in the first place. Is it simply to increase employee morale? Is the equipment for rehabilitative purposes? Are you filling an equipment need within the community? Or are you trying to reduce employee absenteeism or contain employee health care costs for a small company? If either of the latter is your goal, you will probably want to purchase equipment for your worksite that emphasizes aerobic conditioning.

USER DEMOGRAPHICS

If you are purchasing equipment for home use, you need to keep in mind only yourself and any other family member who may use it. However, for safety reasons, take heed if children could get to the equipment. Some equipment can cause serious injuries.

If you are purchasing equipment for

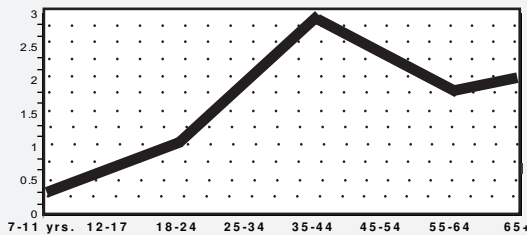
facility use, you should get a clear picture of your clientele and their needs and abilities. Ask yourself a series of questions. Is it a senior oriented group? Some equipment is better suited for older adults. Are your clients mostly male or female? The use of

some machines tends to be gender-oriented. Are they limited physically as to what they can do? An inventory of simple-to-use equipment may be in order. Are their goals general conditioning or rehabilitative? You could

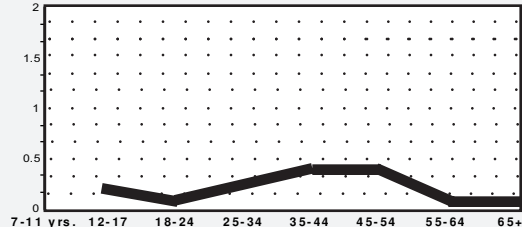
WHO'S USING WHAT FITNESS EQUIPMENT?

A study by the Sporting Goods Manufacturers Association captures the demographic profiles of exercise equipment users. The following graphs show the number (in millions) of frequent users - those who use the machine 100 times or more each year - of the most popular equipment, for each age group.

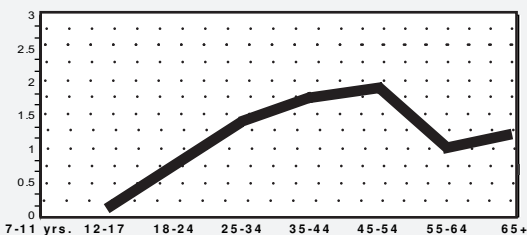
Stationary Bicycle



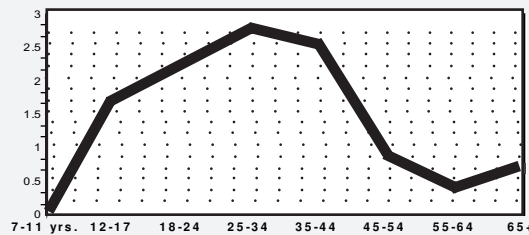
Rowing Machine



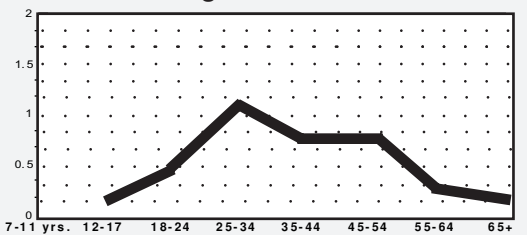
Treadmill



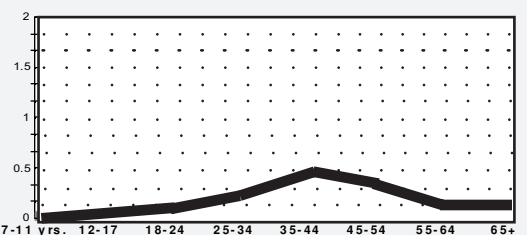
Free Weights



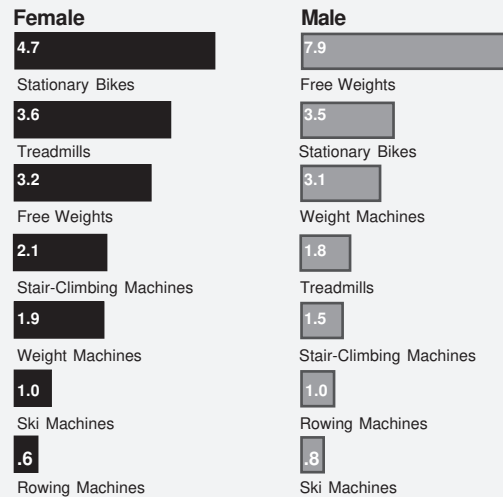
Stair-Climbing Machine



Cross-Country Ski Machine



Frequent Users by Sex (in millions)



survey your clientele to help you better answer these questions.

SIMPLICITY

This factor is much easier to evaluate for the home fitness purchaser. Since you are the user, you can determine your comfort with a machine's simplicity or complexity. If your spouse or another individual will be sharing the equipment with you, make sure any adjustments that are required are fairly quick and simple to make. If it is difficult to make these adjustments, you may find it harder over time to motivate yourself to use the machine.

Taking into account the simplicity of exercise equipment is a major concern for the facility purchaser. Any adjustments required of the user should be few and easy to make. Not only will difficult adjustments serve as a turnoff to your clientele, but they can be particularly troubling to older users, many of whom have arthritis. You also want to make sure the equipment is simple to learn. Clients will be less inclined to use equipment that takes more than a moment to learn.

Another drawback to equipment that is difficult to learn is the strain it causes on staff time. First, staff must take time throughout the day to teach people how to use the equipment. Second, if you don't have full-time fitness professionals on staff, everyone who helps with the supervision of the equipment must have a thorough

WHAT PRODUCTS TO AVOID

The American College of Sports Medicine suggests avoiding products that:

1. claim you'll see results immediately
2. claim to make exercise an effortless, no-sweat workout
3. claim to get rid of fat from a certain area
4. claim that wearing certain equipment or clothing while exercising will help you lose weight

source: ACSM Fitness Book

knowledge of it. This education of staff and clientele on equipment usage and safety takes a great deal of time. *Fitness Management*, a magazine for fitness professionals, suggests that any equipment requiring the user to learn nonfunctional movements or to incorporate more than two movement patterns be avoided.

COST

Cost is an obvious consideration for both the home and facility equipment purchaser. However, try not to let cost be the sole determinant in purchasing exercise equipment. You may buy cheap equipment of poor quality and then spend more money in repairs, new equipment or liability costs than you actually saved. A good rule of thumb is that if the price of the equipment is significantly lower than that of

other similar equipment, check out the manufacturer. You can do this by asking gym owners, fitness professionals or the Better Business Bureau.

If cost is getting in the way of purchasing equipment that fits your needs, consider buying used equipment. This option is discussed in detail in another section of this guide. If you have equipment that is not being used or is not needed anymore, you may be able to sell it or trade it in on a purchase of new equipment.

DURABILITY

Generally, the more complicated a piece of equipment is to use or adjust, the more maintenance it may require. Some manufacturers use cheaper parts and production shortcuts to lower their costs. Although this factor is important to the home purchaser, durability may be more critical to the facility equipment purchaser since the equipment will probably get more use. Things to consider regarding the durability of equipment include joints, the frame and base, cables, and padding. Each of these factors is discussed in another chapter.

SAFETY

Safety is also a major consideration for both the facility purchaser and the home purchaser. Reports from the U.S. Consumer Product Safety Commission show that 25,269 Americans were

admitted to emergency rooms in 1990 with injuries caused by exercise equipment. More than half of those admitted were children under the age of 15. These statistics underscore the importance of keeping children away from equipment and maintaining close supervision of children playing on or near exercise equipment.

In regard to safety, ask yourself a variety of questions. How stable is the equipment? Can it accommodate all users regardless of size? Are moving parts enclosed to protect users? Are there any pinch points? Get on the equipment (or have several of your clients do so) and imagine all possible scenarios. You may also contact the Consumer Product Safety Commission (800/638-2772) to find out if the item has ever been recalled or comes with a safety alert. For example, the agency issued a safety alert cautioning parents of small children not to buy exercise bicycles that do not have chain guards.

If you are buying weight machines or free weights for facility use, there are other safety issues to be considered. Proper free-weight usage requires a spotter or spotters when a client performs maximum lifts. You may not have enough staff to accommodate this. If you want a weight machine, favor equipment designed to place the body in appropriate body alignment. Following initial instruction, this allows participants to train safely by themselves.

APPEAL

A home purchaser should make sure the equipment's look and features are appealing so that they will want to continue to use it. A facility equipment purchaser must know the likes and dislikes of his or her clientele. While more electronic displays and gadgetry can translate into more repairs, experts say these gadgets can serve as an incentive to motivate people to continue to use the equipment. On the other hand, a machine with lots of gadgetry may scare some apprehensive exercisers. The gadgetry can also serve as an attraction to young children, which can be a safety concern. If you do want extras, you will pay more for such devices as speed and mileage displays, caloric usage gauges, and monitors that can simulate a race.

Position, grip, angles, smooth action and contoured body supports all contribute to appeal. Be careful not to overemphasize the appeal factor, however, or you may buy poor quality equipment simply because it looks good.

SPACE

This is a factor that may seem obvious, but one that is sometimes overlooked by the purchaser. Before purchasing exercise equipment for either home or facility use, you must make sure you have proper spacing to accommodate the equipment. Such spacing must allow for easy access to the equipment and enough room to actually use the equipment. If you have any doubts at all, measure the doors and floor space and take into account the floor layout before making any purchase.

If the equipment you are considering is already assembled, don't forget to make sure it is not too big to fit through the door or too tall for the ceilings. You also may want to consider the equipment's weight. Can it be easily moved for cleaning or to make room for other activities? Can the floor handle the weight of the equipment and a user(s)? Some equipment, like many stationary bikes and stair climbers, are fairly compact and can be moved when not in use.

The following pages include checklists of questions to help the home equipment and facility equipment purchaser evaluate exercise equipment. Make photocopies of the relevant page and complete a separate checklist for each piece of equipment you look at. Answer each question on a scale of 1 to 5. A rating of 1 equals "not at all," while a rating of 5 equals "very much." NA means "not applicable." Total the points for each piece of equipment you look at and compare your ratings.

HOME FITNESS EQUIPMENT PURCHASER CHECKLIST FOR EVALUATING EQUIPMENT

QUESTIONS	not at all	-	somewhat	-	very much	NA
	1	2	3	4	5	
How does it meet my goals (i.e. aerobic, anaerobic, or rehabilitative goals)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How safe is it if children get to it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the joints (welded or bolted) appear strong?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it stand steady on its base, even when in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it appealing to me (with the displays/gauges I want)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it comfortable to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it quiet while in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are adjustments easy and quick to make?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will it fit into my designated exercise space and still provide enough room to get on and off?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the equipment easy to move?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How durable do the pads, gauges, joints and other parts appear?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it provide an activity that I would enjoy doing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How good is the warranty and refund policy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have I received good recommendations from friends, fitness professionals or others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it fit into my budget?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
point totals	___	___	___	___	___	___
TOTAL SCORE _____						

FACILITY EQUIPMENT PURCHASER CHECKLIST FOR EVALUATING EQUIPMENT

<u>QUESTIONS</u>	not at all 1	- 2	somewhat 3	- 4	very much 5	NA
How does it meet my goals (i.e. improve employee morale, rehabilitative purposes, fits the interests of my clientele)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How safe is the equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the joints (welded or bolted) appear strong?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it stand steady on its base, even when in use by a heavy set person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you think the look will be appealing to your clientele (including displays/gauges)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the equipment require much staff time (training, maintenance, spotting, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it quiet while in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are adjustments easy and quick to make?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will it fit into the designated space and provide enough room for the other equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the equipment easy to move?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How durable do the pads, gauges, joints and other parts appear?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will my clientele enjoy doing the exercise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How good is the warranty and refund policy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have I received good recommendations from friends, fitness professionals or others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it fit into my budget?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
point totals	_____	_____	_____	_____	_____	_____
	TOTAL SCORE					_____

Facility equipment should be spaced far enough apart to provide adequate safety and allow participants easy access to each piece of equipment. You should also make sure the equipment does not block access to emergency exits. If your space is inappropriate for housing more than one piece of equipment, you may want to look into an exercise machine or one that accommodates a variety of uses. A versatile machine can take the place of three or four items. However, this solution can sometimes be a problem when there is heavy traffic and people have to wait to get to the machine.

SERVICE/RECOMMENDATIONS

The importance of service and warranty to your buying process cannot be underestimated. Sooner or later, even the best equipment will need maintenance. Check the warranty of the manufacturer and the service program of the vendor. Are you basically left on your own after the purchase? If so, does the company have a toll-free technical support hotline? If you have any doubts about the service program of the vendor or the manufacturer, ask for references. Or pick up the phone and make phone calls to area fitness professionals to see if they have dealt with the company before.

Another consideration related to service that is sometimes overlooked is the initial assembly of the equipment. Find out if the store will assemble the equipment for you. If not, ask to see

the instructions to determine if assembly is too complicated or time consuming.

Wherever you decide to buy your equipment, make sure the store has a reasonable return policy. Check to see if you can return equipment within 30 days. If you decide to purchase through the mail, the American College of Sports Medicine recommends that you do not purchase any equipment from a magazine or catalog unless you have seen and tried it. At the very least, make sure you have some recommendations from friends or other professionals who have used it. Ask the vendor what the equipment's return rate is. If the return rate is high, research the equipment more in depth.

TRY IT OUT!

Upon assessment of these eight factors, you should have a good idea of what you want. Before making a final decision, however, always test the equipment. Treat the test as you would a test drive of a car. Use it at a low, medium and high intensity. Shake or tip the equipment to check its balance and safety. And listen for odd sounds.

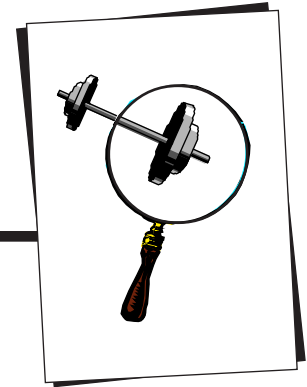
If you don't have access to the equipment, you can go to a local fitness club to try out equipment. Many offer free passes or trial memberships. This will give you the opportunity to decide what you like and will use.

The American College of Sports Medicine recommends that you do not purchase any equipment from a magazine or catalog unless you have seen and tried it.

The facility equipment purchaser should accompany people of various sizes, ages and abilities to a fitness club, YMCA/YWCA or fitness equipment speciality store. Allow each person to try out the equipment you are considering. Their input can help you determine the equipment's usefulness for the different sectors of your clientele.



EVALUATING QUALITY EQUIPMENT AND FEATURES



Quality is important to the home purchaser, but especially critical to the facility purchaser because of the greater daily usage. A quality machine is less likely to break down soon after your purchase. Your ultimate goal, of course, is to get the longest life possible from the equipment.

As previously noted, this guidebook is not specifically designed for the person interested in equipment for commercial use. Commercial equipment is generally high in quality, but it is also high in cost. However, there are plenty of non-commercial items on the market that are of excellent quality.

When examining the quality of equipment, there are a number of things to consider.

PADDING

Make sure the equipment has enough padding. Harder foam is typically used in heavy wear areas and softer material is used in support areas. Contour shapes are great for comfort, but remember that the less complex the shape, the easier it is to replace.

UPHOLSTERY

Upholstery is another thing to keep in mind when examining the padding. Does the covering of the pads look durable? Double-stitched, fitted upholstery may result in a longer life than stapled/pleated covers. The best covers are upholstered on the back so that the user's fingers do not pull at the fastenings.

JOINTS

Check to see if the welds are sturdy. Make sure joints that are bolted remain steady during an exercise workout and do not wobble.

BASE

Does the equipment stand securely on its base? You certainly do not want to purchase anything that wobbles. When examining this factor, you may want to have a heavy-set person test the equipment.

FRAME

Check to see what the maximum recommended load is. Machines are

usually designed for people of average weight. If you are considerably overweight, or you have clients that are, the frame potentially can be strained or damaged.

You should also consider what the frame is made of. Is it steel or aluminum? Steel is more durable and generally lasts longer. If it is made of steel, note what gauge the steel is. The gauge indicates the strength of the steel. The lower the gauge, the stronger and more stable the steel. Experts recommend that steel be at least 11-gauge.

One final note regarding the frame. If weight stacks are included, such as on a weight machine, you should note whether the stack is tilted or straight. A tilted weight stack can cause the guide rod to wear out and bend or break.

CABLES

Does the equipment use chains, cables or belts? Belts are generally more durable because resistance is spread over a wider surface. Both belts and cables tend to be quiet.

MOTOR

If the equipment has a motor, such as on a treadmill, listen to the motor at low speed. Is it quiet or does it hum? If it hums, it may be having to work too hard.

FINISH

If you are a home equipment purchaser, you may not care if the paint chips or rusts, but a facility purchaser should be concerned since the attractiveness of the equipment can motivate users. Ask if the manufacturer's warranty covers premature wear of the finish.

RECOMMENDED LIFE

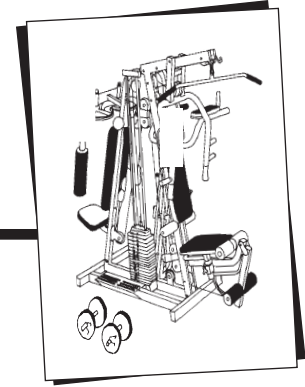
Many manufacturers include a recommended life for their machines. Though not a reliable estimate of a machine's life, it can be helpful during your evaluation. A machine without a recommended life might be worth questioning.

ELECTRONIC COMPONENTS

Though it can be a motivating factor, electronic gadgetry will add to your maintenance costs. If you do decide to go with the gadgetry, consider how long it will take for repairs. Can you do it yourself, such as snapping in a new replacement chip? How easy is it to obtain the replacement part?



A LOOK AT USED EXERCISE EQUIPMENT AS AN OPTION



For many home and facility equipment purchasers, cost is a major factor in deciding what to buy. You want quality equipment that fits your needs, but you must also stay within your budget.

Used fitness equipment is a popular option. The purchase of equipment has increased tremendously during the 1990s. Home fitness equipment is a \$1 billion market, and privately-owned fitness facilities are more popular than ever. Unfortunately, many home equipment buyers quickly lose their enthusiasm for the machines, while many fitness centers owners end up closing their doors saddled with debts. They look to recoup some of their investments by selling the equipment at discounted prices.

If you check the classifieds section of a Sunday paper, you will find advertisements from many would-be home exercisers. Many dealers also offer used exercise equipment. In fact, a few companies have made millions of dollars selling only used equipment.

Some resale shops sell on consignment. In other words, they split the income from the sale of each item with the owner of the equipment. Other stores buy equipment outright and accept trade-ins. There are even some dealers that sell rental, demonstration or

refurbished equipment.

You may want to pick up a fitness professional trade magazine from your local library or newsstand. Many include advertisements for used equipment from fitness suppliers or fitness centers that are going out of business.

ADVANTAGES

There are several advantages to purchasing used exercise equipment. First and foremost is the cost. The cost of used equipment can be dramatically lower than what it would cost new. Purchasing used equipment can also provide you the opportunity to buy a machine with more quality and features than you could otherwise afford. It may even allow you to purchase equipment that is designed for commercial use, such as at a spa or fitness center. Such equipment is generally more durable and high-tech.

DISADVANTAGES

On the other hand, there can be a variety of disadvantages to purchasing used equipment. If you purchase equipment from an individual through the classifieds, you probably will not

get any type of guarantee or warranty, unless it is fairly new and the manufacturer's warranty is still in effect. Without a manufacturer's warranty, your only recourse if the equipment needs repair is to rely on the sympathy of the seller.

Some dealers provide limited refund policies. Others offer the same guarantee as the manufacturer, which can range from 90 days to a year. In almost every instance, strength equipment is given a longer warranty than aerobic equipment, because it lasts longer. Many experts even suggest that you avoid new equipment and look at only used equipment if you are interested in weights or other weight machines with limited moving parts.

repaired or refurbished. If it has, the new parts may have a separate warranty.

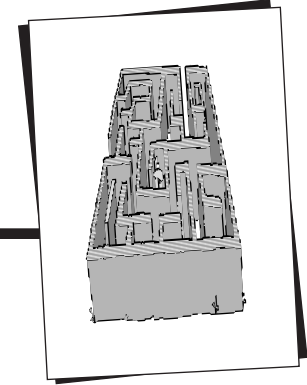


DON'T FORGET

As you would for new equipment, make sure you consider the eight factors discussed earlier as you evaluate used equipment. Your best bet to avoid a bad purchase is to test the equipment out before buying. It is helpful, if possible, to try out the equipment new at a store or gym so you will know how it should work.

If the seller is an individual, ask him or her why he/she is selling the equipment and if he/she experienced any problems with it. If the seller is a dealer, find out where the equipment came from and if the dealer offers a refund policy or warranty. You should also ask if the equipment has been

WHERE TO PURCHASE EXERCISE EQUIPMENT



Deciding on where to purchase exercise equipment can be a lot like searching through a maze. In fact, it can be as hard as deciding on what equipment to buy. The increase in equipment demands over the decade has translated into an explosion of new suppliers.

Before you decide where to purchase your equipment, it is advisable to decide on what you will purchase first. This will allow you to make a better decision as to which fitness supplier fits your needs.

This chapter describes your supplier options and the pros and cons of each. Keep in mind that you can, and possibly should, use several suppliers. Simply because you test a machine out at one store does not mean you have to buy from there.

DIRECT FROM THE MANUFACTURER

You can save some money by purchasing equipment direct from the manufacturer. Many manufacturers advertise on television, radio, on the Internet or in publications. You can also find their names, addresses and phone numbers in annual resource guides. A few of these guides are

identified in the resources section of this guidebook.

But not all manufacturers will accommodate the individual purchaser. Some work only through authorized dealers. Equipment ordered from a manufacturer will be delivered, and assembly that is required must generally be completed by you. In addition, your only familiarity with the equipment when working through the manufacturer is based on the literature it provides. Make sure that you test the equipment locally before placing your order.

FITNESS EQUIPMENT/SPORTING GOODS CHAINS

Regional and nationwide fitness equipment/sporting goods chains are quite common in all states. Such suppliers buy in bulk, so their prices tend to be competitive. They generally offer a wide selection, from home products to the higher priced commercial models. You usually have the opportunity to test out the equipment in the store.

Another advantage to purchasing from these suppliers is that the sales staff have a fairly good knowledge of the

equipment. Unfortunately, there tends to be rapid staff turnover among such stores, so that the knowledgeable sales person who helped you with your purchase may not be around if you have problems down the road.

Usually, you must pay for delivery and assembly. These are occasionally offered at no charge with the more expensive machines.

LOCAL SPORTING GOODS STORES

Twenty years ago, locally owned and operated sporting goods stores were the only option. In recent years, many have closed their doors due to the competition from the bigger chain stores.

The local sporting goods stores generally do not have the selection that the bigger chain stores offer, nor can they offer such low prices. What they can offer, however, is experience from an owner who has been in the business for some time. He or she typically is a fitness advocate and very familiar with all of the equipment. In most of these stores, a sample of each type of machine is assembled and on display for you to test out.

You also have the satisfaction of knowing that if anything goes wrong, it's a short drive to the store to deal with the owner.

RETAIL CHAIN STORES

The general retail chain stores have entered the fitness market over the past decade as the demand for equipment has increased. Typically, such stores offer only one or two brand names per machine. They also tend to be inexpensive, which sometimes means poorer quality. However, that does not mean you can't buy a quality product from a retail chain store.

Equipment at retail chain stores is rarely on display for you to test, though it is often available to look at. In addition, the sales staff of the sporting goods sections of retail chain stores are typically unfamiliar with the equipment. You have to rely on your own research to make an informed purchase.

MEDIA

Whenever you respond to an advertisement or infomercial you ultimately will be ordering from the manufacturer.

Due to the large number of infomercials on television today that tout the newest equipment products, ordering through the media offers its own pitfalls.

Many of these infomercials and advertisements make false claims. In addition, many of the products are not sold locally, so you can't test them prior to purchase. Experts advise you to shy away from any product you cannot

test, even if it offers a money-back guarantee.

If you want to buy an item from a television advertisement, keep in mind the tips on equipment to avoid from the American College of Sports Medicine. These tips are listed on page six of this guidebook.



TODAY'S MOST POPULAR EQUIPMENT

Information to make a more informed decision

The exercise boom of the 1980s and 1990s has created a bonanza in the number of fitness equipment products available on the market. With hundreds of machines to choose from, each with its unique gizmo's and gadgets, making a decision on what to purchase is not an easy task.

Fortunately, with the technological advances that have been made in the equipment industry, it is now possible to find affordable machines with the quality and options that used to be available only with expensive, commercial equipment.

Most machines on the market emphasize specific health benefits. Many, such as treadmills and stationary bicycles, work the cardiovascular system (heart and lungs). Others, such as weight machines, increase muscle strength. A few offer the benefits of both cardiovascular conditioning and muscle strengthening.

This chapter provides information on the most popular exercise machines available today. The equipment summaries provide basic information so

A QUICK GLANCE AT THE MOST POPULAR EQUIPMENT				
PRODUCT	ADVANTAGES	DISADVANTAGES	BENEFITS	COST
Rowing Machine	well-rounded workout	user may get bored with; may strain back; proper form must be maintained	good overall workout	\$200 - \$3,000
Stair Machine	easy to use; good aerobic exercise	may cause back strain;	good aerobic activity; good muscle toner	\$200 - \$2,000
Treadmill	ease of use; easy on joints with proper use	pricey; may require more maintenance	great for lower body workout	\$200 - \$9,000
Stationary Bicycle	space saver; easy to use	uses fewer muscles than other machines	great for lower body	\$140 - \$1,200
Recumbent Bicycle	back support; easy to use	large; uses fewer muscles than other machines	great for lower body	\$350 - \$1,000
Cross Country Ski	users tend to remain motivated; min. back strain	hard to learn; requires good coordination	total body workout	\$200 - \$700
Weight Machine	variety of exercises; may be safer than free wts.	space user; hard to use; pricey	exercises work on specific muscles	\$200 - \$1,500
Free Weights	can be space savers; can be inexpensive	may require spotters; proper education needed	muscle strength and endurance	varies greatly
Rider	inexpensive; easy to use;	may cause back strain; benefits may diminish	good aerobic activity	\$80 - \$550

that you can make a more informed buying decision.

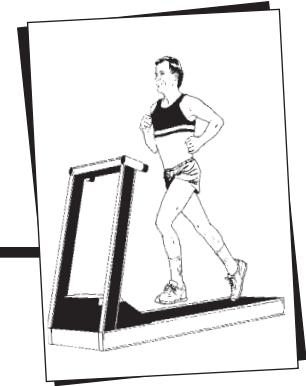
This chapter does not go into detail about the monitors and electronic gadgetry that can be included with some equipment. These gadgets can include speedometers, distance readouts, pulse monitors, display scans (which includes a variety of readouts), timers and calorie counters. The more expensive machines may include monitors that simulate races.

Such devices can serve as a motivational tool for users. They can make exercising more entertaining for some. However, such items are probably more apt to break down than the

machines themselves. In addition, less expensive machines tend to come with lower quality gadgets.



TREADMILLS



GENERAL INFORMATION

A treadmill is a wide belt stretched over a bed between two sets of rollers. Treadmills can provide a great aerobic workout. They are appropriate for almost anyone who can walk or jog, but some experts warn that treadmills may not be appropriate for people who have debilitating illness, orthopedic problems or balance problems.

Treadmills come in manual and motorized models. Manual models, which are often much less expensive, allow the user to control the speed of the belt through his or her pace. Motorized models keep you working hard while giving you a smoother walk or run. They require you to keep up your pace, working the cardiorespiratory system and leg muscles.

Many treadmills also come with an elevation option. This option allows the user to walk or jog on an incline for a more vigorous workout.

ADVANTAGES

Walking or running on a treadmill is a fairly natural, enjoyable exercise. Most treadmills have some "give" to them, making the machines easier on the joints than walking or jogging outside.

DISADVANTAGES

Motorized treadmills may not be appropriate for some older adults, who may feel uncomfortable and unsteady on them. A treadmill with front and/or side railings may be advantageous for such individuals. An emergency stop button, which stops the machine immediately, and a wide belt surface may also be desirable.

Even the smallest treadmills take up a great deal of space. However, there are now treadmills on the market that fold up for storage, much like an ironing board. Non-motorized versions

require considerable practice to keep a steady pace.

KEEP IN MIND

On motorized treadmills, the motor should be at least 1.5 horsepower for running. If your clientele will be using the treadmill for running, you'll want one with a wide speed range. An ability to adjust the speed during use is a plus. Make sure the controls are easy to adjust during exercise, particularly the emergency stop button.

Check the maximum weight load of the machine. It may not be suitable if you or any of your clientele weigh more than the machine's maximum. The belt should be wide and long enough to accommodate your stride, or the stride of your tallest clients. The surface should also offer some "give" to the user's feet.

Be aware of the height of the treadmill. Generally, treadmills that are only an inch above the floor provide easier access to older individuals. Treadmills that are a foot above the floor have more risk of injury associated with them.

Several models come with front and side rails for balance. These rails help the beginner and anyone who feels unsteady on the machine. Look for sturdy railings which permit arm movement. Shop for a quiet operation. You can even buy models with

childproof on/off buttons.

The more sophisticated treadmills include displays indicating speed, grade, miles covered and caloric usage. You can program some of them for a complete workout. However, some electronic gadgets are made cheaply and tend to malfunction. They may be added to inflate the price.

COSTS

Price for treadmills can be one argument against them. Recommended bottom-line models start above the cost of the other equipment listed in this guide. Experts recommend you avoid buying a treadmill if you can't afford a good one. Poorer units tend to break down and are awkward to use. Prices range from \$200 to \$9,000. The more costly models are usually designed for institutional use and are quite large. The cheapest models (under \$300) may be too small, slow, weak or flimsy for joggers or heavy people.



CROSS COUNTRY SKI MACHINES



GENERAL INFORMATION

Cross country ski machines have moveable ropes or poles for the arms, and either ski-like boards on rollers or foot pads on wheels. They are designed to simulate the feel of cross-country skiing.

ADVANTAGES

Because ski machines cause little jarring impact, they are very good on the knees and, when used properly, can spare bad backs. These machines simulate cross-country skiing, so many experts believe they provide the most complete workout. Ski machines use most of the muscles in the lower and upper body. They provide excellent aerobic conditioning and some increased muscle strength. One study shows that people use ski machines over the long haul more than any other kind of indoor fitness machine.

DISADVANTAGES

The major disadvantage of ski machines is that it takes time to learn to use them. The skis move dependently on some machines, independently on

others. Dependent motion means that the skis are linked, so moving one ski forward pushes the other one backward. Dependent motion forces the legs into an awkward, stiff-legged shuffle. Machines with independent motion, on the other hand, generally take more practice to learn to use correctly.

KEEP IN MIND

Despite the greater difficulty in mastering independent motion ski machines, many people eventually enjoy them more because the exercise is smoother, more ski-like and potentially more vigorous. Dependent machines may be worth considering if your fitness level, or that of your clientele, is fairly low. Older adults may find dependent machines less intimidating.

When looking at a ski machine, make sure it has a long enough base to accommodate your stride or the stride of your tallest client. Some experts suggest ropes and pulleys over pistons and shock absorbers. Pistons and shock absorbers can wear out and be expensive to replace, while ropes and pulley models tend to work more smoothly

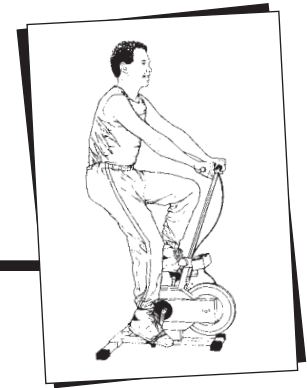
and are more easily repaired. Any machines with a rough operation or screeching sound should be avoided.

pay more for a ski machine than for any of the other equipment choices discussed in this guide. Ski machines can cost between \$200 and \$700. The purchaser should be prepared to spend about \$300 to get a quality machine.

COSTS

One drawback of the ski machines is the price. You can probably expect to

STATIONARY BICYCLES: UPRIGHT AND RECUMBENT



GENERAL INFORMATION

The most popular product among exercise equipment, stationary bicycles, provides an excellent, non-impact aerobic workout. Stationary bicycles come in upright and recumbent models. Upright models resemble regular bicycles, while recumbent models include a seat with back support further away from the pedals so that the legs are parallel to the floor while cycling.

Both models can include a flywheel, a fan or both. Flywheel models allow increased resistance without increasing speed. Fan only models require the exerciser to increase speed in order to boost air resistance. Some have moveable handlebars that work the upper-body muscles. These handlebars are pushed and pulled by the exerciser while he/she pedals.

ADVANTAGES

Stationary cycling requires minimal balance or coordination. Bicycles can be used by people who have difficulty walking or problems with balance. On models with motionless handlebars, you can even read while exercising.

Exercise bicycles are usually less expensive than most other indoor fitness equipment. They also tend to break down less than other aerobic machines, and upright models generally take up less space. Recumbent bicycles can be quite bulky.

DISADVANTAGES

Although stationary bicycles, when used properly, can put less strain on the knees, they do focus on the muscles

of the thighs and can aggravate knee problems. Stationary cycling without moveable handlebars exercises only the lower body; therefore, people have a hard time losing weight using cycling programs only. Stationary bicycles are also not as good for the bones as other machines, since the skeleton doesn't have to bear much body weight in a sitting position.

WHAT TO LOOK FOR

A comfortable seat is crucial. If everything seems right about a particular bicycle except the seat, you can sometimes replace it with another seat. Also, make sure that the height can be adjusted. Your leg should extend almost completely when the pedal is at its lowest point. The handlebars should be adjustable, too.

Avoid buying a bicycle on which the flywheel or fan stops turning the moment you stop pedaling. This will cause you to strain to get the wheel or fan moving again after each pause in your pedaling. Look for bicycles that have counterweights to keep the pedals upright so it's easier to slip the feet into the straps. Avoid bicycles with exposed spokes or holes in the flywheel, which can cause injury.

Recumbent bicycles let you sit back on a wide, comfortable chair instead of a narrow seat. They are particularly good for pregnant women and for

people with back and neck problems.

COSTS

Most upright exercise bicycles cost between \$140 and \$1200. Cycles costing less than \$150 are often very flimsy. They may also be hard to pedal. Relatively expensive cycles mainly offer fancier electronic gadgets. Recumbent bicycles typically cost more than comparable upright bicycles. They may range from \$350 to \$3000.



STAIR CLIMBERS



GENERAL INFORMATION

The stair climbing machine hit the fitness equipment scene with a boom in the early 1990s. However, sales of the product have slowed in recent years. The stair climber simulates walking up stairs and provides the same aerobic benefits. Stair climbers consist of two small platforms that alternately drop under the exerciser's weight to mimic climbing stairs or rungs.

There are two types of stair climbers: the stepper and the ladder. The stepper has side railings or handles. On some models, these handles move back and forth. The ladder has moveable handles as well, but they move up and down from a point above the exerciser's shoulders or head. As the name implies, this type mimics the motion of climbing up a ladder.

Stair climbers are like ski machines in that certain models allow the exerciser to move the steps independently, while other models have steps that are linked; when the exerciser pushes one step down, the other step moves up. A few models are available that let the exerciser switch from one mode to the other.

ADVANTAGES

Stair climbers are easy to use for most people. They offer a good, low-impact workout for hips, buttocks and legs. Varied workout settings influence intensity by setting step rate and effort degrees. Ladder types also work the arms. Very little coordination is required for stair climbers, and most are equipped with bars for balance. Stair climbers generally take up little space. For the home equipment purchaser with minimal space availability, another option is the inexpensive, portable stepper. Portable steppers are discussed on page 33 of this guidebook.

DISADVANTAGES

Experts caution people with knee problems against using stair climbers. Some experts also warn that the equipment does little for the upper body. Although most people will find stair climbers easy to use, people who are out-of-shape, heavy and older may have some problems. Stair climbers with independent steps give you a better workout, but many people find them hard to use. Older adults in particular may find stair climbers with

independent steps difficult to use. Stair climbers with side railings are a must for older adults.

KEEP IN MIND

Lower priced models use hydraulic pistons rather than a motor, which can make a jerky ride. Hydraulic models typically won't last as long. Those with motors can operate at various speeds, although all climbers allow for variable resistance. When testing a stair climber, make sure it is stable and cannot be tipped over in any direction. It should also be easy to change the tension.

Many people find a stride counter worthwhile. These counters allow the

exerciser to chart progress over time. Higher-end stair climbers can include heart rate and aerobic capacity monitors. Some allow you to program a workout.

COSTS

Prices can vary from less than \$200 to more than \$2,000. Portable steppers can cost as little as \$40. The more expensive stair climbers tend to operate more smoothly, allow for a wider range of adjustments for tension and include more electronics.

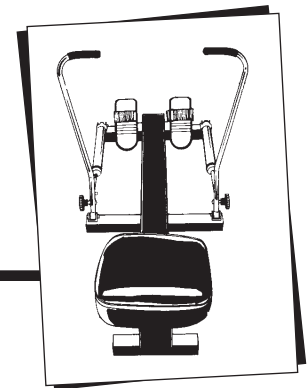


ROWING MACHINES

GENERAL INFORMATION

Rowing machines used to be one of the most popular exercise products, but interest in them has declined in recent years. Most experts like the rowing machine because it provides benefits for both the upper and lower body. Rowers come in two models: fan and hydraulic. Fan rowers work on air

resistance with a handle linked by cable to a fan.



Hydraulic rowers, which include most home versions, consist of shock absorbers attached to handles that you use like oars. Both types generally include a sliding seat on a track that the exerciser can pull and push himself on. Both types offer similar benefits.

ADVANTAGES

Rowing machines give a great overall workout. They condition the cardiovascular system, heart and lungs as well as the calves, thighs, buttocks, hips, arms, stomach and shoulders. Rowers with a sliding seat work the legs and upper body more than those without one.

DISADVANTAGES

Rowers tend to gather more dust than the other machines discussed in this guidebook. Although they provide a great workout, many people find that the exercise can get repetitious. This is probably the reason interest in them has diminished.

Rowers can be somewhat rough on the body, especially for out-of-shape and older people. The most important thing when using a rower is proper form, which is not necessarily obvious to the exerciser. Bad rowing form can harm the knees and back. People who already have problems in these areas may want to avoid the machine.

KEEP IN MIND

It is very important that the machine fits the user's frame. People over six feet tall find many rowing models do not allow enough room for their strokes. When you are purchasing for

a facility, make sure to take along someone who is over six feet tall. Rowers can take up quite a bit of room. Many home rowers, however, can be folded and stored under a bed.

Other things to look for include a sturdy frame and smooth movement throughout the strokes. If the machine includes a track, experts recommend a seat that moves on ball-bearings, which tend to last longer. The footrests should swivel, and they should not be at a sharp angle. Finally, make sure the seat is comfortable (and will accommodate people of different sizes, if you are a facility purchaser). If it is not, the machine probably won't get much use.

COSTS

Hydraulic rowers are generally cheaper, although many people prefer a fan rower because it feels more like real rowing. Hydraulic rowers can range from \$200 to more than \$3,000. Fan rowers can cost just under \$1,000 and more.



WEIGHT MACHINES



GENERAL INFORMATION

Weight machines, like free weights, are designed mainly to build muscle strength. Weight machines are safer than free weights because weight machines eliminate the risk of the exerciser dropping weights on himself or herself. They can also often force the exerciser into a safe position and to lift correctly. Weight machines can range from multi-station machines to smaller, single-station machines that allow variations of a particular exercise, such as arm curls. All weight machines consist of a metal frame, one or more padded seats or benches, and various handles, levers, or straps attached to resistance devices.

The most common of these resistance devices include weights. Alternatives to weights include flexible bands, rods, hydraulic pistons and brakes. Weight models typically include a cable and pulley system that allows the exerciser to lift a stack of heavy plates. Many experts recommend weight models because they can be easier to control. They also can be more enjoyable to use over time because the exerciser knows exactly how much weight he or she is lifting. Thus, progress is easily charted.

ADVANTAGES

Weight machines provide a wide range of exercises for building and toning muscles. Some aerobic benefit can be obtained by performing the different exercises with minimal rest for at least 20 minutes. For households with more than one exerciser or for facility use, many weight machines provide the added benefit of allowing for more than one user at a time.

DISADVANTAGES

Weight machines are typically designed for people between 5 feet 8 inches and 6 feet tall. This can be a problem for shorter and taller individuals. Overweight users may also experience problems with some machines.

KEEP IN MIND

Make sure any adjustments required for size and variance in exercises are quick and easy to make. For facility purchasers, make sure the exercises are simple to learn. The more complex, the less time people will spend on the machine and the more time staff will

spend with instruction.

Even the smallest weight machines take up a lot of space. For multi-station machines, the space required is considerable. Because of their size and number of parts, assembly on many machines can be difficult and time consuming. If you have to assemble the equipment yourself, make sure you or your staff can do the work required.

than \$1,500. Weight machines with various stations can cost three to four times that amount.



COSTS

The rule of thumb for weight machines is the more you spend, the better the equipment. More money will give you better quality, better adjustments and more stations. The least expensive single station machines can cost more

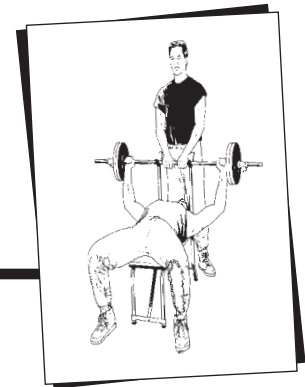
FREE WEIGHTS

GENERAL INFORMATION

Free weights are by far the most inexpensive of the popular exercise products. Free weights include dumbbells and barbells. Like weight machines, they are designed primarily for strength training. A good bench and a weight rack are optional components to a weight set but highly recommended for safety. They are a must for facility use.

ADVANTAGES

Free weights can be used for a variety of exercises, from arm curls to bench presses. Although strength training is their primary benefit, free weights can also provide some aerobic benefits if weight exercises are done quickly over at least a 20 minute period with minimal rest. The low cost of free weights adds to their desirability. For the home exerciser who does an aerobic



activity like jogging or swimming, free weights may be the perfect addition for overall fitness.

DISADVANTAGES

Free weights can be dangerous, which is why it is extremely important that anyone using them understands proper form and usage. For safety, a knowledgeable staff member should always be on hand when exercisers are using free weights. Poor form can cause severe injuries, and the lifter may drop the weights on himself or herself. Thus it is important to have a spotter when a weight lifter uses barbells. The need for a spotter can be troublesome for facilities with small staffs. Free weights in general can be demanding on staff time. Another safety precaution for facilities is to house free weights in a room that can be locked, or in a lockable storage closet.

KEEP IN MIND

Although free weights are basic in design with no mechanical parts, there are still a few things to keep in mind when purchasing them. Make sure the weights and bar(s) are made of quality steel — chrome and stainless steel will prevent rusting. Check for a good grip and a way of preventing the weighted plates from falling off during use. Olympic style bars with collars are best.

You will have to purchase a wide vari-

ety of plate and dumbbell weights. This is important for the home exerciser, so he or she can add weight as muscle strength increases, and for the facility purchaser so clients of all fitness levels can be accommodated.

COSTS

Since there are no mechanical parts involved, used weight sets may be the best option when purchasing free weights. New sets can cost between \$100 to \$200. Benches cost \$50 to over \$300. Facility purchasers should look at higher-end benches, which are specifically designed for multiple lifters. Weight racks can run from \$40 to \$150. For safety reasons, both benches and racks are recommended. They should be a rule of thumb for facility purchasers.



EXERCISE RIDERS



GENERAL INFORMATION

Exercise riders are the hottest exercise product on the market today. They were No. 1 in 1995 in the number of machines sold, possibly due to the high volume of rider commercials and infomercials. Their popularity is largely based on sales to home exercisers. You won't find many at commercial spas or fitness centers.

Exercise riders resemble a stationary bicycle without the wheel or pedals. As the exerciser moves the handlebars forward and back, the seat rises and falls. The user's speed and force provides the machine's resistance.

ADVANTAGES

Because riders require you to push with your legs and pull with your arms, rider manufacturers claim the machine provides an overall workout. Riders are easy to use. Space requirements are minimal, about the same as stationary bikes, and some models can be folded up and stored under the bed. Many rider users say they enjoy the equipment, an important part of maintaining motivation.

DISADVANTAGES

Riders have many critics in the fitness world, although no formal studies on their effectiveness have been conducted. Many experts say the machines tend to be too hard for some exercisers and too easy for others. Because the machine's resistance is based on the exerciser's force, heavier exercisers (who are often the most out-of-shape) can be overworked. Many experts also say that riders are rough on the hip flexor muscles and knees. Overworking the hip flexors can result in backaches and loss of flexibility.

KEEP IN MIND

When evaluating a rider, make sure that it fits your body frame well. If more than one person will be using it, check the size of individuals it can accommodate. Since they are relatively new, riders' durability is unknown, especially for multi-person use. Most are geared for home use, so facility purchasers should evaluate the equipment as carefully (or more carefully) than you would a stationary bicycle or rowing machine. Make sure they are not motor driven; passive exercise does not produce any fitness gains.

COSTS

The least expensive models can be as little as \$80 while expensive versions can cost up to \$550. Facility purchasers interested in a rider should buy a higher-end model. Because of their newness to the market, there may be

some hardly-used versions available on the used equipment market. This may allow you to purchase expensive models for a fraction of their original price.

OTHER PRODUCTS

Perhaps half of the thousands of products and programs on the fitness market today either do not provide their advertised benefits or quickly end up unused. A few fitness options, however, may be worth a look depending on your needs.

STEP PLATFORMS

The exerciser steps on and off of sturdy platforms. Height for some models can be adjusted. Many home videos incorporate step platforms into their aerobic routines. Step platforms can also be ideal for facility use.

Facility purchasers on a limited budget can purchase numerous platforms and pay for a certified aerobics instructor to provide group sessions. The cost for platforms ranges from \$20 to \$75.



PORTABLE STEPPERS

These are portable versions of the stair climbing machines discussed previously. Portable steppers generally do not come with rails, and many do not include handles. Their size and lightweight frame make them desirable for home purchasers who have limited space. Many home purchasers who travel the road as part of their work also find them enjoyable because they can easily fit in the trunk of a car. The main drawback for portable steppers is their stability—some can flip over during a workout. They may not be the ideal equipment for older adults. Their instability also makes them inappropriate for facility use.

EXERCISE BANDS

These elastic bands, sometimes called “Dyna Bands,” serve as muscle building alternatives to free weights. They are also cheaper, usually running less than \$10 each. Many fitness videos incorporate them into routines. They are also often incorporated into exercise class routines.

Elastic bands are used, in particular, with older adults, who find them less intimidating and safer than dumbbells and barbells. When purchasing them, make sure the bands you are getting were made with exercise in mind.

JUMP ROPES

These are easily forgotten “oldie but goodies.” If you haven’t used these since childhood, you may not remember what a workout they can provide. Some even come with weights for strength training. Experts disagree as to the actual effectiveness of this type of jump rope.

The advantages of jump ropes are that they are inexpensive, extremely portable and provide outstanding cardiovascular benefits. However, people who aren’t very fit or coordinated and older adults may find it difficult to get a quality workout. Jumping rope is a strenuous activity and can contribute to increased muscle soreness.

EXERCISE MATS

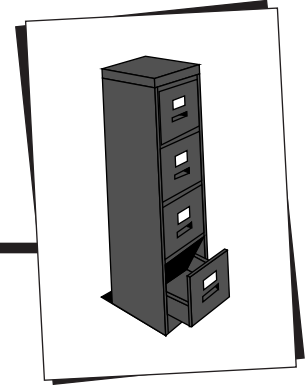
These can provide comfort and protection when doing a variety of exercises, such as stretching exercises, push ups or sit ups. They may not always be necessary for home exercisers who exercise on carpeting, but they are probably something that facilities should include since many of their fitness areas have hard floors. In addition some models can be easily folded and moved. They are relatively inexpensive, usually between \$25 and \$75 depending on their size.

SLIDE BOARDS

These are basically slippery floor mats that the exerciser stands on and slides from side to side. They have become quite popular in commercial fitness center exercise classes. Slide boards provide excellent cardiovascular benefits and help tone the lower body. People with bad backs and knees may want to avoid them. Slide boards may also be difficult for older individuals with balance problems and limited range of motion. They range from \$25 to \$75.



OTHER RESOURCES



The following organizations, articles, books and other resources offer information about purchasing exercise equipment. Inclusions on this list does not imply endorsement by the Governor's Council on Physical Fitness

and Health. The Council is not responsible for opinions or endorsements expressed by these resources.

ORGANIZATIONS

AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, RECREATION & DANCE

1900 Association Drive
Reston, VA 22091

Phone: 703 476-3400

A non-profit membership organization of over 35,000 professional educators.

ASSOCIATION OF PHYSICAL FITNESS CENTERS

600 Jefferson St., Ste. 203
Rockville, MD 20852

301 424-7744

Promotes the general welfare of firms and corporations engaged in the physical fitness industry.

INTERNATIONAL SPA & FITNESS ASSOCIATION

1300 L Street, NW #1050
Washington, DC 20005

202 789-5920

The association serves as a clearinghouse for spa resorts, products and services.

IRSA, THE ASSOCIATION OF QUALITY CLUBS

253 Summer Street
Boston, MA 02210

800 228-4772

A not-for-profit trade association for racquet, athletic and fitness clubs.

NATIONAL ASSOCIATION OF USED FITNESS EQUIPMENT DEALERS

151 Liberty St., Ste. 14
Little Ferry, NJ 07643

201 807-9838

An association developed to set quality-of-service standards that health club operators can expect to receive from their associates. The membership acts as a consumer watchdog and Better Business Bureau.

NATIONAL EMPLOYEE SERVICES & RECREATION ASSOCIATION

2211 York Rd., Ste. 207
Oakbrook, IL 60521

708 368-1280

Serves organizations and individuals responsible for providing employee services, recreation and fitness programs through education, information and professional development.

NATIONAL INTRAMURAL & RECREATIONAL SPORTS ASSOCIATION

850 S.W. 15th Street
Corvallis, OR
97333-4145
503 737-2088

The premier organization for recreation sports professionals.

NATIONAL RECREATION & PARK ASSOCIATION

2775 South Quincy St., Ste. 300
Arlington, VA 22206
703 820-4940

A not-for-profit organization serving as the united voice of the park recreation movement.

PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

450 15th St., N.W., Ste. 7103
Washington, DC 20001
202 272-3470

Premier federal program on the promotion of fitness and sports.

SPORTING GOODS MANUFACTURERS ASSOCIATION

200 Castlewood Drive
North Palm Beach, FL 33408
407 842-4100

National trade association of manufacturers and distributors of athletic apparel and equipment.

ARTICLES

BACK IN THE SADDLE AGAIN

Looks at home exercise riders; products' features and benefits.

Newsweek, June 26, 1995, Vol. 125; issue 26, pp. 58.

BUYING USED EQUIPMENT

Covers the ins and outs of the used equipment industry.

The Boston Herald, March 31, 1994.

BUYING USED WITHOUT BEING USED

Tips for buying used equipment.

Fitness Management, July 1994, pp. 32.

EQUIPMENT QUALITY FEATURES

What to look for when evaluating the quality of exercise equipment. The article is geared toward the commercial equipment purchaser, but it can be applied to all equipment.

Fitness Management, July 1993, pp. 36.

EXERCISE EQUIPMENT

This annual special report examines the benefits, advantages, disadvantages and features of home gyms, treadmills, exercise bikes, stair climbers and ski machines.

Consumer Reports, January 1996, pp. 14.

EXERCISE MACHINES DO'S AND DON'TS

Presents guidelines for the safe use of stair climbing machines, stationary bicycles and ski machines.

Weight Watchers, June 1995. Vol. 14; issue 6, pp. 19.

***FITNESS MACHINES:
EXPERIENCING TECHNICAL
DIFFICULTIES?***

Describes some common physical ailments associated with popular exercise equipment and suggests remedies. The equipment includes stair climbers, rowing machines, ski machines and other exercise equipment.

Body Bulletin, May 1995, pp. 3.

HOME GYM HAZARDS

Guidelines for preventing children from injuring themselves on exercise equipment.

Parents Magazine, October 1995, pp. 20.

HOME SWEAT HOME

Discusses what to keep in mind when purchasing exercise equipment.

Maclean's, October 24, 1994. Vol. 107; issue 43, pp. 42.

***HOW SAFE IS YOUR HOME
EXERCISE EQUIPMENT?***

Provides techniques in assessing home exercise equipment.

Good Housekeeping, February 1995. Vol. 222; issue 2, pp. 179.

PLAY IT SAFE

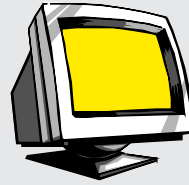
Steps to avoid disappointing results and injury.

Total Health, Vol.17; issue 1, pp. 20.

PORTABLE STAIR CLIMBERS

Looks at the advantages and disadvantages of portable stair climbers.

Men's Health, May 1994. Vol. 9; issue 4, pp. 14.



**ON-LINE
EQUIPMENT
INFORMATION**

The Internet has a wealth of information for those looking to purchase equipment. Although new sites on the Internet are being added constantly, there were at least three sites at the time of this guide's publication that might be worth checking out.

<http://ep.com/x/gmnm.html>

The World Wide Web's EPage Health Products Classifieds allows people to place classifieds for used fitness equipment just as they would in their local paper.

<http://www.fitnessworld.com>

This site is managed by *Fitness Management*, a monthly magazine for adult fitness professionals. It includes a facilities and equipment exchange forum, which allows the user to ask industry experts questions regarding fitness equipment.

<http://www.cybercise.com/ace.html>

This site is managed by the American Council on Exercise (ACE), the largest, not-for-profit fitness certifier in the world. The site includes a forum for communicating with other professionals about equipment.

Many manufacturers and dealers also have sites on the Internet. Some sites offer coupon and discount sections that can be printed out in coupon form.

PREVENTION = PROFIT

Discusses how to keep equipment maintained.

Fitness Management, July 1995, pp. 39.

SELECTING SAFE EQUIPMENT

Guidelines for instructors, coaches and administrators on providing safe equipment.

JOPERD, February 1993, pp. 33.

SERVICE: BEFORE, DURING, AFTER

Examines what kind of service one should expect for commercial equipment.

Fitness Management, July 1993, pp. 39.

THE GOOD, THE BAD & THE TACKY

Evaluates the resistance ball, water weights, weighted jump rope, abdominal isolator, thighmaster, treadmill

and sweatbelt.

Weight Watchers, September 1995. Vol. 28; issue 9, pp. 32.

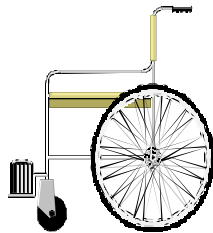
THE HOME GYM: GET A WORKOUT WITHOUT TRAINING YOUR WALLET

Tips from fitness trainers, equipment makers and retailers.

Money, October 1993, pp. 174.

WHERE TO FIND EXERCISE EQUIPMENT FOR THE DISABLED

There are a few companies that manufacture exercise equipment specifically for the disabled. *Parapalegia News*, a magazine produced by the Paralyzed Veterans of America, conducted a survey in 1994 to



determine what companies offer exercise equipment for the disabled. The following companies responded to the survey. Their inclusion in this guidebook does not imply endorsement by the Governor's Council, the Paralyzed Veterans of America, or *Parapalegia News*.

ACCESSIBLE FITNESS SYSTEMS - offers several alternative fitness-equipment items, including a tabletop handcycle and a mini-gym for wheelchairs.

BATTLE CREEK EQUIPMENT - offers the Pedar Exerciser, which can be positioned on the floor for leg exercise or on a table for arm exercise.

BOW FLEX, INC.- manufacturer of the Versatrainer, an exercise machine that utilizes a cable pulley system.

FREEDOM MACHINE - designed for wheelchair users to increase their strength and endurance.

HELM DISTRIBUTING, INC. - manufactures the Equalizer 5000, a weight machine for parapalegics, quadrapalegics and able-bodied users.

HUGHES TECHNOLOGIES, INC. - manufactures the Hughes Superset Model HP 200, which allows for more than 35 exercises for parapalegics.

SARATOGA ACCESS AND FITNESS INC. - offers a cycle that can be used for arm exercise on any table top and for leg exercise when placed on the floor.

SINTIES SCIENTIFIC, INC. - product line includes the Basic Power Trainer, which exercises both the arms and legs.

THOELE MANUFACTURING- offers the Pedal-In-Place, which was developed to aid quadraplaegics, parapalegics, stroke victims and others with limited arm and leg usage.

You can obtain a copy of the article from *Parapalegia News* that provides more information on these companies and their products (including phone numbers and addresses) by calling the Governor's Council at (919)733-9615.

TRICKS OF THE TREAD

Reviews the variety of features available with treadmills.

Men's Health, September 1995. Vol. 10; issue 7, pp. 125.

WHICH EXERCISE MACHINES ARE BEST FOR YOU

Aerobics guru Kenneth Cooper offers suggestions for choosing home exercise equipment.

JOPEHRD, April 1995, pp. 14.

WEIGHTING AT HOME

Looks at the various options available for home exercisers.

Women's Sports and Fitness, November/December 1995, pp. 72.

BOOKS

ACSM FITNESS BOOK

Provides a game plan for the beginner exercise. Includes a section on purchasing equipment.

American College of Sports Medicine. Champaign, Illinois: Leisure Press, 1992.

ACSM'S HEALTH/FITNESS FACILITY STANDARDS AND GUIDELINES

Provides comprehensive standards and guidelines for the quality operation of health/fitness facilities.

American College of Sports Medicine. Champaign, Illinois: Human Kinetics, 1992.

GUIDELINES FOR EMPLOYEE HEALTH PROMOTION PROGRAMS

Designed for the worksite health and fitness professional. Includes a section on fitness facility planning.

Association for Fitness in Business (now Association for Worksite Health Promotion). Champaign, Illinois: Human Kinetics Books, 1992.

PLANNING FACILITIES FOR ATHLETICS, PHYSICAL EDUCATION AND RECREATION

Includes information on budget, space requirements and the purchasing of equipment.

The Athletic Institute and American Alliance for Health, Physical Education, Recreation and Dance. 1985.

OTHER

ATHLETIC BUSINESS' ANNUAL BUYERS' GUIDE

Produced annually by the magazine *Athletic Business*, this guide includes directories of products, manufacturers and associations.

FITNESS MANAGEMENT'S PRODUCTS & SERVICES SOURCE GUIDE

Produced annually by the magazine *Fitness Management*, this guide serves as a who's who of the fitness equipment industry.

HOME FITNESS BUYER'S GUIDE

A publication that describes the range of machines and equipment available and provides buying tips.

For a free trial subscription, write to *Home Fitness Buyer's Guide*, P.O. Box 714-C, Lincoln, Mass. 01773.

REFERENCES

ACSM Fitness Book. Champaign, Illinois: Leisure Press, 1992.

Black, Pam. "Flex time: The Right Stuff for Home Workouts." *Business Week*, January 25, 1993, pp. 106-7.

Brown, Susan C. "Selecting Safe Equipment: What do we really know?" *JOPERD*, February 1993, pp. 33-36.

Cohen, David. "8-Factor Analysis of Resistance Equipment." *Fitness Management*, July, 1994, pp. 29-30.

Colacino, Dennis. "How to Select Equipment that Fits Your Facility." *AWHP's Worksite Health*, Fall, 1995, pp. 46-7.

Collins, Clare. "Buying Used Fitness Equipment." *The New York Times*, March 31, 1994.

Cooper, Kenneth. "Which exercise machines are right for you?" *JOPERD*, April, 1995, pp. 14.

Dunkin, Amy. "Flex Time: The Right Stuff for Home Workouts." *Business Week*, January 1993, pp. 106-7.

Evaluating Worksite Health Promotion Programs: A Toolbox for Health Promotion Professionals. Chapel Hill, North Carolina: The UNC Center for Health Promotion and Disease Prevention, 1996.

"Exercise/Fitness Equipment Manufacturers." *PN*, February, 1994, pp. 18-21.

Gandolfo, Christina. "Buying Used Without Being Used." *Fitness Management*, July, 1994, pp. 32-4.

Gandolfo, Christina. "Service: Before, During, After." *Fitness Management*, July, 1993, p. 39.

"Indoor Alternatives for Winter-Wary Walkers." *Body Bulletin*, November, 1994.

Johnston, Lawrence F., McMurray, Robert G., Wright, Elizabeth E. "Concepts in Fitness Programming." Chapel Hill, North Carolina: The UNC Center for Health Promotion and Disease Prevention, 1993.

Kasriel, Ken. "Home Fitness Equipment offers a private way to get in shape for the sedentary." *HealthFirst*, June, 1991, pp. 13-17.

Marriott, Michael. "Back in the Saddle Again." *Newsweek*, June 26, 1995, pp. 57.

Murdoch, Guy. "Home Exercise." *Consumers' Research Magazine*, March, 1995.

Peterson, Susan L., Tharrett, Stephen J. "Buying Smart." *Fitness Management*, July 1993, pp. 29-32.

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Pitts, Ed. "Equipment Quality Features." *Fitness Management*, July 1993, pp. 36.

"The Good, the Bad & the Tacky." *Weight Watchers Magazine*, September, 1995, pp. 32-5.

Tracking the Fitness Movement. Fitness Products Council, Volume II, 1995.

Vincent, Christopher. "Exercise Machine Do's and Dont's." *Weight Watchers Magazine*, June 1995, pp. 19.

"Working out at home: How to Pick an Exercise Machine." *Consumer Reports*, February 1995, pp. 16-18.

OTHER GCPFH PRODUCTS

HELP SPREAD THE WORD ABOUT FITNESS



front view

**ORDER YOUR
ANOTHER DAY...
ANOTHER CHANCE
TO BE HEALTHY
T-SHIRT TODAY!**



back view

Order your "Another Day ... Another Chance To Be Healthy" t-shirt from the N.C. Governor's Council on Physical Fitness and Health today! The shirt is white with an exciting design on the front in four vibrant colors: jade, brandywine, gold and purple. The Council's logo is on the back in jade. In addition to getting this fantastic shirt, your purchase will help improve the physical fitness and health of North Carolinians. All proceeds go to the North Carolina Health and Fitness Foundation, which serves to fund Council programs and events.

-----detach and mail-----

PLEASE RUSH ME:

- ___ S shirts @ \$12.00 each = _____
- ___ M shirts @ \$12.00 each = _____
- ___ L shirts @ \$12.00 each = _____
- ___ XL shirts @ \$12.00 each = _____
- ___ XXL shirts @ \$13.00 each = _____

*Add \$2.50 per
shirt for shipping
and handling*

TOTAL ENCLOSED (including S&H): \$

SHIP TO:

Name _____
 Address: _____
 City/Zip: _____
 Phone: _____

Please make checks payable to the **North Carolina Health and Fitness Foundation, Inc.** To order, please detach this form and mail with your check to the North Carolina Health and Fitness Foundation, Inc., P.O. Box 27687, Raleigh, NC 27611-7687. For more information, call us at (919) 733-9615.

*****ORDER 10 OR MORE AND WE WILL SHIP THEM FOR FREE!*****

Help keep the spirit of the Olympic Torch burning!

The Centennial Olympic Games may be over, but you can help keep the spirit of the Olympic Torch burning in North Carolina with the purchase of an Olympic Spirit license plate. You can order your 5-colored plate for just \$25.00 (\$45.00 for a personalized plate).

Proceeds from the sale of the Olympic Spirit Plate will support physical fitness and sports programs in North Carolina and further Olympic sports development in North Carolina and throughout the nation. Display your Olympic Spirit year round by ordering your plate today!



Support your United States Olympic Team, the Governor's Council on Physical Fitness and Health and the State Games of North Carolina

Fill out the application on the reverse side and mail to:

N.C. Division of Motor Vehicles
 Attn: Personalized Plates
 1100 New Bern Avenue
 Raleigh, NC 27697-0001

PLEASE MAKE YOUR CHECK PAYABLE TO THE N.C. DEPARTMENT OF MOTOR VEHICLES (NCDMV)

For more information, call the N.C. Division of Motor Vehicles (919)733-7510 or visit your local license tag office.

GUIDELINES FOR PURCHASING EXERCISE EQUIPMENT

NORTH CAROLINA DIVISION OF MOTOR VEHICLES

1100 New Bern Avenue
Raleigh, North Carolina 27697-0001

APPLICATION FOR AN **OLYMPIC SPIRIT** LICENSE PLATE

- REGULAR OLYMPIC SPIRIT FEE \$25.00
- PERSONALIZED OLYMPIC SPIRIT FEE \$45.00

NOTE: When applying for a Personalized Olympic Spirit license plate, remember the letter suffix representing the Olympic Spirit must still be the last letter on the plate. This leaves only four (4) spaces for a personalized message. The four spaces may be a combination of letters or numbers, but cannot conflict with another classification of license plates.

THE ABOVE FEES ARE ANNUAL FEES IN ADDITION TO THE REGULAR LICENSE FEES.

- Automobile
- Private Small Truck
- Trailer

Home _____
AREA CODE - TELEPHONE NUMBER

Office _____
AREA CODE - TELEPHONE NUMBER

NAME (To agree with certificate of title)		
FIRST	MIDDLE	LAST
ADDRESS		
CITY	STATE	ZIP
Current North Carolina	VEHICLE IDENTIFICATION NUMBER	
PLATE NUMBER	YEAR	MODEL MAKE BODY STYLE
STICKER NUMBER		

SPECIAL	\$ _____
PERSONALIZED	\$ _____
TOTAL	\$ _____
Classification	
OLYMPIC SPIRIT	
Branch No.	Agent

DMV VALIDATION

IF PERSONALIZED OLYMPIC SPIRIT PLATE IS DESIRED, LIST CHOICES IN ORDER OF PREFERENCE: (REMINDER, OLYMPIC SPIRIT SUFFIX IS THE LAST LETTER ON THE PLATE)

1. _____ (G) 2. _____ (G) 3. _____ (G) 4. _____ (G) 5. _____ (G)

DRIVER LICENSE NUMBER _____

Owner's Certification of Liability Insurance

I CERTIFY FOR THE MOTOR VEHICLE DESCRIBED ABOVE THAT I HAVE FINANCIAL RESPONSIBILITY AS REQUIRED BY LAW.

PRINT OR TYPE FULL NAME OF INSURANCE COMPANY AUTHORIZED IN N.C. - NOT AGENCY OR GROUP

POLICY NUMBER - IF POLICY NOT ISSUED, NAME OF AGENCY BINDING COVERAGE

SIGNATURE OF OWNER _____

DATE OF CERTIFICATION _____



GOOD HEALTH THROUGH PHYSICAL ACTIVITY



The U.S. Surgeon General released a first-ever report on physical activity and health in July 1996. The report stresses that it is important for people to include physical activity in their lives. It can be a formal exercise program that includes stretching, muscular strength and cardiovascular endurance or an increase in general physical activity.

The report points out that too many people are inactive or do very little. Its main message is that Americans can substantially improve their health and quality of life by including moderate amounts of physical activity in their daily life. Additional benefits can be gained by further increases in activity levels, such as spending 30 continuous minutes three times each week working vigorously on a stationary bicycle or stair climbing machine.

Despite the benefits of regular physical activity, the majority of people in the United States and North Carolina choose to remain inactive. Twenty nine percent of American adults participate in no physical activity, while 43 percent of North Carolina adults are physically inactive. This fact ranks North Carolina 49th in adult physical activity of all 50 states. Physical inactivity is more common among women

than men. It is also more common among African-American and Hispanic adults than whites, among older than younger adults, and more common among less affluent than more affluent people. Unfortunately, the number of inactive people across the country continues to rise.

BENEFITS

There are many reasons to be physically active. Regular physical activity reduces the risk of dying prematurely, builds healthy bones, muscles and joints, reduces the risk of developing heart disease, diabetes, colon cancer and high blood pressure, controls weight, enhances the immune response system, improves mobility, and combats depression and anxiety. Virtually everyone in the United States can benefit from some type of regular physical activity.

Adolescents and young adults

- ❖ Both male and female youth benefit from physical activity.
- ❖ Understanding the concept of physical fitness and being physically active at a young age can



The type of activity you choose should be based on your interests and what you will most likely continue. People who are just beginning to get physically active or who are starting a formal exercise program should set a goal of 30 minutes of moderate activity daily. Include activities designed to increase muscle strength and flexibility for overall physical fitness.

HOW TO GET STARTED

The President's Council on Physical Fitness and Health gives several tips for getting physically active. If you are purchasing equipment for a facility, pass this information on to your clients.

Be realistic

Choose an activity that you learn easily or that you have easy access to. Set small, realistic goals. For example, set a short-term goal to go on a fitness walk or ride a stationary bike on Monday, Wednesday and Friday. Gradually increase your time and intensity so that you can reach a long-term goal of 30 minutes of vigorous activity three times each week.

Plan ahead

Think of the best, most convenient way to insert your exercise program into your busy schedule. Write this down in your calendar. By making appointments with yourself, you are more likely to stick to the activities.

Find a partner

You'll enjoy the sessions more and will have someone to motivate you if you exercise with a partner.

Keep a record

Keep track of your progress. Seeing your progress on paper can provide encouragement. It will also help you avoid doing too much, too soon.

RISKS

Physical activity does carry some risks. The most common problems associated with it include mild sprains and strains. The risk of these injuries increases with an increase in the duration or intensity of the activity. Although people who engage in vigorous physical activity have a slight increase in risk of sudden cardiac death during activity, the health benefits outweigh this risk. Such an occurrence is also very rare. Overall, the potential benefits of regular physical activity seem to outweigh the risks.

Remember, any person 35 years of age and older not accustomed to exercise or anyone with previous medical problems should consult a physician before beginning any type of exercise program.



prevent the onset of some diseases.

- ❖ Physical activity promotes sensory stimulation for optimal growth and development and early cognitive function.
- ❖ Youth who are physically active have better self-concepts, self-esteem and social competence.

Adults

- ❖ Men and women of all ages benefit from a moderate amount of daily physical activity.
- ❖ The benefits of regular physical activity can be realized no matter at what age it is begun.
- ❖ Additional health benefits can be gained through greater amounts of physical activity.

Older adults

- ❖ Physical activity does not have to be strenuous for older adults to achieve health benefits.
- ❖ Regular physical activity for older adults can help them maintain the ability to live independently and reduces the risk of falling and fracturing bones.
- ❖ In addition to the benefits of exercise on the cardiovascular system (aerobic activity), older adults can benefit from muscle-strengthening activities.

- ❖ Physical activity helps control joint swelling and pain associated with arthritis.

People with disabilities

- ❖ People with disabilities are less likely to engage in physical activity than people without disabilities, yet they have similar needs to promote their health and prevent unnecessary disease.
- ❖ Physical activity can help people with chronic, disabling conditions improve their stamina and muscle strength.
- ❖ Physical activity reduces symptoms of anxiety and depression and promotes general feelings of well-being.

HOW MUCH IS ENOUGH?

Significant health benefits can be obtained by including a moderate amount of physical activity (30 minutes of brisk walking or 15 minutes of running) on most days of the week. Additional health benefits can be gained through greater amounts of physical activity. The frequency, intensity and duration of activities contribute to the beneficial effects of physical activity. Higher intensity or longer sessions could be performed three times weekly to achieve cardiovascular benefits. Lower intensity or shorter sessions should be performed more often to achieve cardiovascular benefits.

