

Lifestyle Behaviours and Arthritis

Patients with arthritis should know that there is much that can be done in terms of diet and lifestyle management that can strongly influence the state of their joints.

Most of the messages in relation to lifestyle and behaviours are not 'rocket science'. It is putting them into action that is challenging for some.

Medical interventions using medications, injections, etc, do play a role in managing arthritis. However, attending to behaviours is vital as part of the 'project'.

The document contains information on:

- Healthy Eating
- Supplements for Arthritis
- Sleep
- Exercise

The Healthy Eating Pyramid

The Healthy Eating Pyramid is shown on the attached diagram. Have a careful look at it. It is based on a foundation of daily exercise and weight control, since these two related elements strongly influence your chances of staying healthy. They also affect what you eat and how your food affects you.

Exercise and weight control are also linked through the simple rule of energy balance: $\text{Weight change} = \text{calories in} - \text{calories out}$. If you burn as many calories as you take in each day, there's nothing left over for storage in fat cells, and weight remains the same. Eat more than you burn, though, and you end up adding fat and pounds. Regular exercise can help you control your weight, and it is a key part of any weight-loss effort.

Focus on Food Quality

You'll notice that the Healthy Eating Pyramid does not give specific advice about the numbers of cups or ounces to have each day of specific foods. That's because it's not meant to be a rigid road map, and the amounts can vary depending on your body size and physical activity. It's a simple, general, flexible guide to how you should eat when you eat.

To follow the Healthy Eating Pyramid, there's just one basic guideline to remember: A healthy diet includes more foods from the base of the pyramid than from the higher levels of the pyramid.

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Within this guideline, however, there's plenty of flexibility for different styles of eating and different food choices. A vegetarian can follow the Healthy Eating Pyramid by emphasizing nuts, beans, and other plant sources of protein, and choosing non-dairy sources of calcium and vitamin D; someone who eats animal products can choose fish or chicken for protein, with occasional red meat.

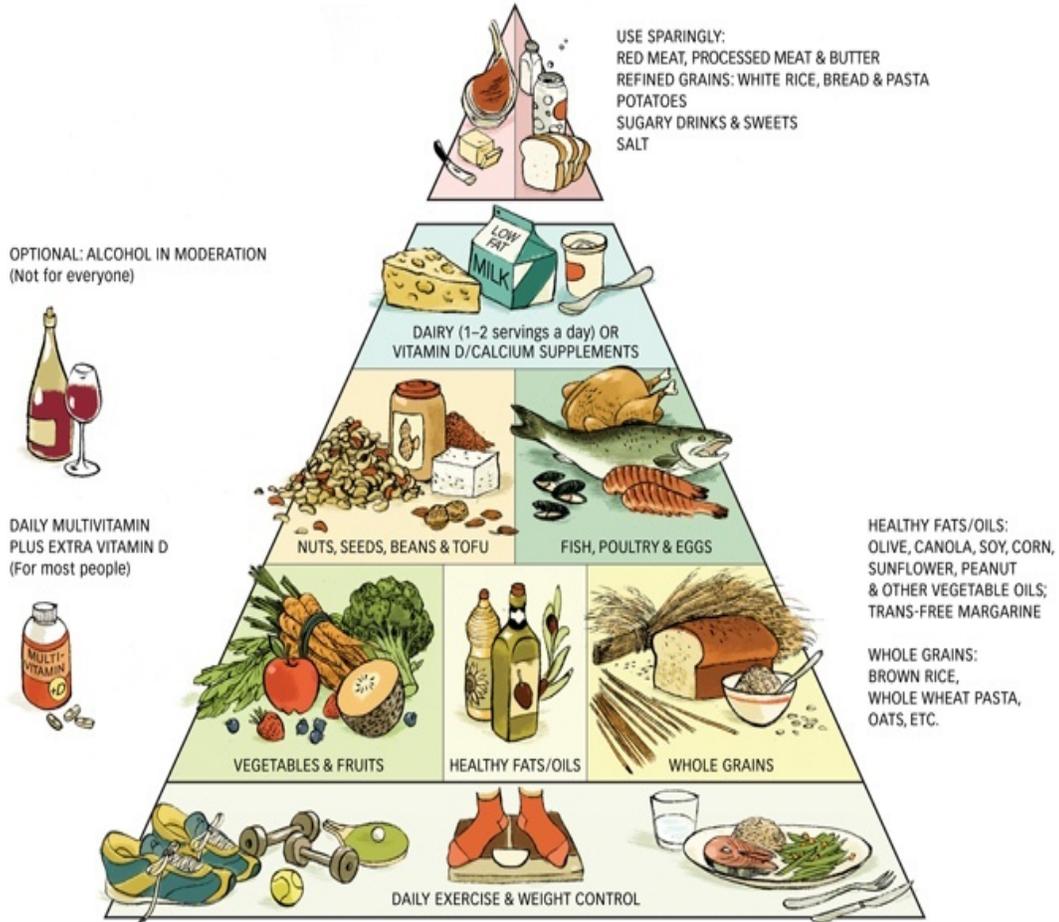
Choosing a variety of fresh, whole foods from all the food groups below the 'Use Sparingly' category in the Healthy Eating Pyramid will ensure that you get the nutrients you need. It will also dramatically lower your salt intake, since most of the salt lurks in processed food—canned soups, frozen dinners, deli meats, snack chips, and the like.

Perhaps the only foods that are truly off-limits are foods that contain trans fat from partially hydrogenated oils. More and more food manufacturers, restaurants, and even entire communities are going trans fat-free, making it easier to avoid this health-damaging type of fat.

Click on this image to download a large PDF of the Healthy Eating Pyramid, or scroll down to read more

THE HEALTHY EATING PYRAMID

Department of Nutrition, Harvard School of Public Health



For more information about the Healthy Eating Pyramid:
WWW.THE NUTRITION SOURCE.ORG

Eat, Drink, and Be Healthy
by Walter C. Willett, M.D. and Patrick J. Skerrett (2005)
Free Press/Simon & Schuster Inc.

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The Building Blocks of the Pyramid

See the diagram of the Healthy Eating Pyramid. Important elements include the following:

Whole Grains



The body uses carbohydrates mainly for energy, and it can get them from many sources—some healthful (beans, vegetables, fruit, whole grains), and some not (sugary sodas and other drinks, sweets). The best grain sources of carbohydrates are whole grains such as oatmeal, whole wheat bread, and brown rice. They deliver the outer (bran) and inner (germ) layers along with energy-rich starch.

The body can't digest whole grains as quickly as it can highly processed carbohydrates such as white flour. This keeps blood sugar and insulin levels from rising, then falling, too quickly. Better control of blood sugar and insulin can keep hunger at bay and prevent the development of type 2 diabetes and heart disease.

Healthy Fats and Oils



Surprised that the Healthy Eating Pyramid puts some fats near the base, indicating they are okay to eat? Although this recommendation seems to go against conventional wisdom, it's exactly in line with the evidence and with common eating habits. The average American gets one-third or more of his or her daily calories from fats, so placing them near the foundation of the pyramid makes sense.

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Note, though, that it specifically mentions [healthy fats](#) and oils, not all types of fat. Good sources of healthy unsaturated fats include olive, canola, soy, corn, sunflower, peanut, and other vegetable oils; trans fat-free margarines; nuts, seeds, and avocados; and fatty fish such as salmon.

These healthy fats not only improve cholesterol levels (when eaten in place of highly processed carbohydrates), but the fats in fish can also protect the heart from sudden and potentially deadly rhythm problems.

Vegetables and Fruits



A diet rich in vegetables and fruits has bountiful benefits. Among them: It can decrease the chances of having a heart attack or stroke; possibly protect against some types of cancers; lower blood pressure; help you avoid the painful intestinal ailment called diverticulitis; guard against cataract and macular degeneration, the major causes of vision loss among people over age 65; and add variety to your diet and wake up your palate.

On the Healthy Eating Pyramid, potatoes don't count as a vegetable, since they are chock full of rapidly digested starch, and they have the same effect on blood sugar as refined grains and sweets. That's why potatoes are in the 'Use Sparingly' tip.

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Nuts, Seeds, Beans, and Tofu



These plant foods are excellent sources of protein, fibre, vitamins and minerals. Beans include black beans, navy beans, garbanzos, lentils, and other beans that are usually sold dried.

Many kinds of nuts contain healthy fats, and packages of some varieties (almonds, walnuts, pecans, peanuts, hazelnuts, and pistachios) can carry a label saying they're good for your heart.

Eating nuts and beans in place of red meat or processed meat can lower the risk of heart disease and diabetes.

Fish, Poultry, and Eggs



These foods are also important sources of protein. A wealth of research suggests that eating fish can reduce the risk of heart disease, since fish is rich in heart-healthy omega-3 fats. Chicken and turkey are also good sources of protein and can be low in saturated fat.

Eggs, which have long been demonized because they contain fairly high levels of cholesterol, aren't as bad as they've been claimed to be. In fact, an egg is a much better breakfast than a doughnut cooked in an oil rich in trans fats or bread or a bagel made from refined flour.

People with diabetes or heart disease should limit their egg yolk consumption to no more than three a week; they can try egg whites, instead, which are very high in protein and are a fine substitute for whole eggs in omelets and baking.

Dairy (1- 2 Servings Per Day) and/or Vitamin D Supplements



Building bone and keeping it strong takes calcium, vitamin D, exercise, and a whole lot more. The Healthy Eating Pyramid recommends dairy products but not in excessive amounts. This is because many people choose dairy products that are high in fat.

Consider there are alternative ways of getting calcium than from milk and cheese, which can contain a lot of saturated fat; cheese is also high in sodium. Dark green vegetables and oily fish are great sources.

Also, most people need more vitamin D than they can get from the diet and in the Northern Hemisphere in the non-summer months; supplementation with 1000IU daily cholecalciferol is recommended. Though there are some health benefits from modest dairy intake, very high dairy intakes are associated with increased risk of fatal prostate and maybe ovarian cancers.

Use Sparingly: Red Meat, Processed Meat, and Butter

These foods sit at the top of the Healthy Eating Pyramid because they contain lots of saturated fat.

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Processed meats, such as bacon, hot dogs, and deli meats are also very high in added sodium.

Eating a lot of red meat and processed meat has been linked to increased risk of heart disease, diabetes, and colon cancer. So it's best to avoid processed meat, and to limit red meat to no more than twice a week.

Switching to fish, chicken, nuts, or beans in place of red meat and processed meat can improve cholesterol levels and can lower the risk of heart disease and diabetes. So can switching from butter to olive oil. And eating fish has other benefits for the heart.

Use Sparingly: Refined Grains—White Bread, Rice, and Pasta; Potatoes; Sugary Drinks and Sweets; Salt



White bread, white rice, white pasta, other refined grains, potatoes, sugary drinks, and sweets can cause fast and furious increases in blood sugar that can lead to weight gain, diabetes, heart disease, and other chronic disorders.

Whole grains cause slower, steadier increases in blood sugar that don't overwhelm the body's ability to handle carbohydrates.

Use salt sparingly, as extensive research links high-sodium diets to increased risk of heart attack and stroke. Since most of the sodium in our diets comes from processed foods, such as cheese, breads, deli meats, spaghetti with sauce, and food prepared away from home, make sure to compare food labels and choose foods with the lowest sodium values.

Multivitamin with Extra Vitamin D (for Most People)



This is an area that is much debated. Some may benefit from a daily multivitamin, multi-mineral supplement. **HOWEVER**, a multivitamin can't in any way replace healthy eating, or make up for unhealthy eating. Centrum is a commonly recommended multivitamin.

Optional: Alcohol in Moderation (Not for Everyone)



Scores of studies suggest that having an alcoholic drink a day lowers the risk of heart disease. Moderation is clearly important, since alcohol has its risks as well as benefits. For men, a good balance point is one to two drinks a day; in general, however, the risks of drinking, even in moderation, exceed benefits until middle age. For women, it's at most one drink a day; women should avoid alcohol during pregnancy.

Potentially Useful Supplements for Arthritis (from a Health Food Shop)

| | |
|------------------------------------|------------|
| Omega 3 | 2.7g / day |
| Avocado-Soybean Unsaponifiables | 300mg/day |
| Glucosamine 1500mg and Chondroitin | 1200mg/day |

Also may be useful:

| | |
|-----------------------------|-------------|
| Cholecalciferol (Vitamin D) | 1000 IU/day |
|-----------------------------|-------------|

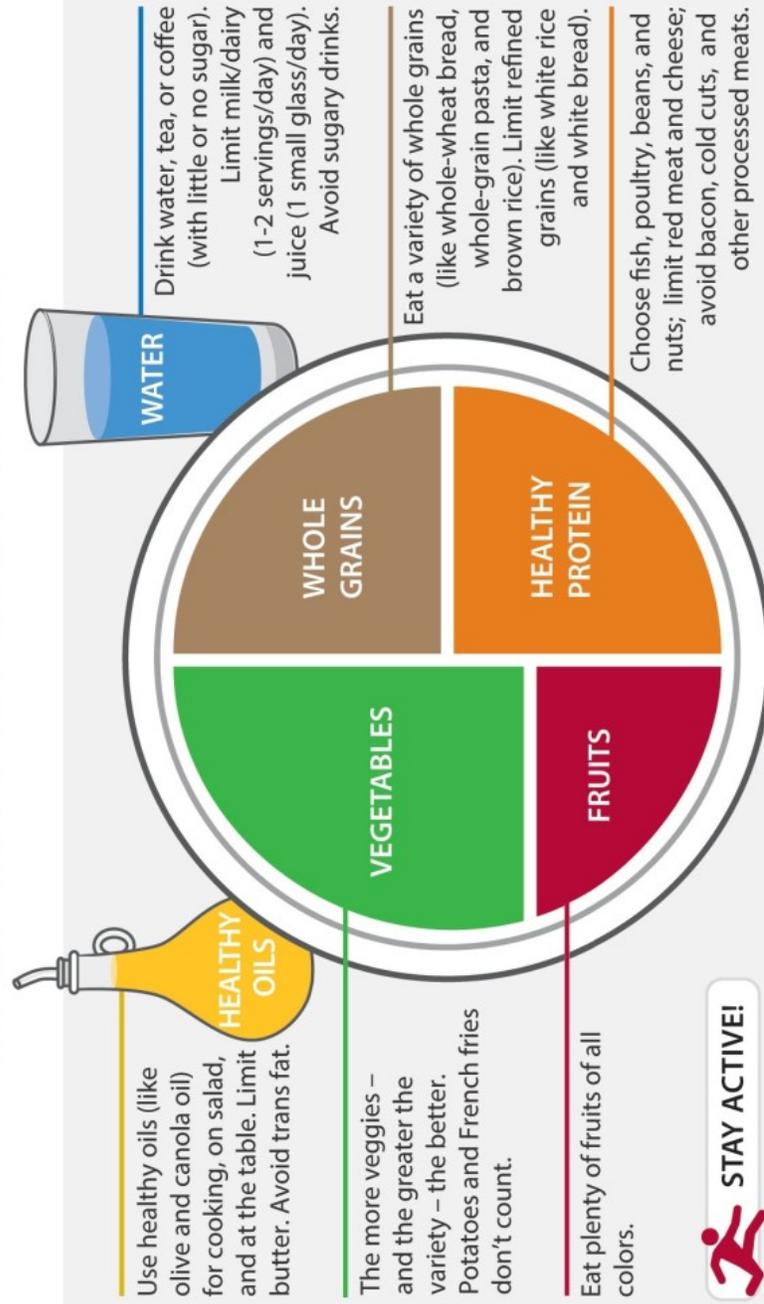
The Healthy Eating Plate

When it's time for dinner, most of us eat off of a plate. So think of the Healthy Eating Plate as a blueprint for a typical meal, for yourself and your family. It has colorful sections reserved for vegetables (green), fruits (red), protein (orange), and grains (brown), and it offers important messages about diet quality, not just quantity:

- **Fill half of your plate with vegetables and fruits.** The more colour, and the more variety, the better. Most people don't get enough vegetables, especially the dark green and red-orange types, or fruits. Potatoes and chips don't count as vegetables.
- **Save a quarter of your plate for *whole* grains—not just any grains:** Grains are *not* essential for good health. What's essential is to make any grains you eat *whole grains*, since these have a gentler effect on blood sugar and insulin than refined grains. Whole grains include whole wheat, brown rice, oats, barley, and the like, as well as foods made with them, such as whole wheat pasta. The less processed the whole grains, the better: Finely ground grain is more rapidly digested, and in turn, has a greater impact on blood sugar than more coarsely ground or intact grains.
- **Pick a healthy source of protein to fill one quarter of your plate:** The Healthy Eating Plate acknowledges that some protein sources (fish, chicken, beans, nuts) are healthier than others (red meat and processed meat).

- **Enjoy healthy fats.** The glass bottle near the Healthy Eating Plate is a reminder to use healthy oils, like olive and canola, in cooking, on salad, and at the table. Limit butter, and avoid unhealthy trans fats.
- **Drink water, coffee or tea.** On the Healthy Eating Plate, complete your meal with a glass of water, or if you like, a cup of tea or coffee. Skip the sugary drinks.
- **Stay active.** The figure scampering across the bottom of the Healthy Eating Plate's placemat is a reminder that staying active is half of the secret to weight control. The other half is eating a healthy diet with modest portions that meet your calorie needs.

HEALTHY EATING PLATE



STAY ACTIVE!

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Using the Healthy Eating Pyramid and the Healthy Eating Plate

The Healthy Eating Pyramid and the Healthy Eating Plate complement each other. Both emphasize foods that promote good health. And both encourage people to limit or avoid foods and drinks that are harmful, or that provide lots of calories but have little nutritional value.

Think of the Healthy Eating Pyramid as your shopping list: Vegetables, fruits, whole grains, healthy oils, and healthy proteins like nuts, beans, fish, and chicken should make it into your shopping cart every week. Add a little yogurt or milk if you like. Skip the sugary drinks and snack food aisle, the deli counter, and the red meat at the butcher counter.

Let the Healthy Eating Plate be your guide to planning a healthy, balanced meal and serving it on a dinner plate—or packing it in a lunch box. Put a copy on the refrigerator at home or at work, to give you a visual guide to portioning out a healthy plate.

The Healthy Eating Pyramid also addresses other aspects of a healthy lifestyle—exercise, weight control, vitamin D and multivitamin supplements, and moderation in alcohol for people who drink—so it's a useful tool for health professionals and health educators.

Source: Harvard School of Public Health

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Weight Loss

How many calories?

Within a healthy balanced diet, an average man needs 2500 kcal/day and a woman needs 2000 kcal /day.

These values vary depending on age, metabolism and levels of physical activity amongst other things. If you take in too few calories in a diet it is not sustainable, and your metabolism slows. If having read this document you are still not sure how to proceed with a weight loss programme, please see the attached NHS Choices document on Weight Loss.

Sleep

Research suggests that there's a link between how much people sleep and how much they weigh. In general, children and adults who get too little sleep tend to weigh more than those who get enough sleep.

There are several possible ways that sleep deprivation could increase the chances of becoming overweight.

- Sleep-deprived people may be too tired to exercise, decreasing the 'calories burned' side of the weight-change equation.

- People who don't get enough sleep may take in more calories than those who do, simply because they are awake longer and have more opportunities to eat.

Lack of sleep also disrupts the balance of key hormones that control appetite, so sleep-deprived people may be hungrier than those who get enough rest each night.

Of course lack of sleep affects other elements of health and well being. Energy levels, concentration, motivation and many metabolic and physiological processes are all adversely affected by lack of sleep.

How much sleep is enough?

People vary. Typically, 7-8 hours per night is considered healthy. Younger people and those who do high amounts of exercise need more.

'Power napping' at work during the day for 15 minutes can be highly beneficial.

As we age we often sleep less well at night; having an hour nap in the day may help to counteract this.

Exercise for Arthritis

The recommendations for exercise in adults are to perform a total of 30-60 minutes daily of aerobic activity (brisk walking or cycling, swimming, etc).

Add to this strengthening in the form of resistance exercise (such as light weights) of most muscle groups, 3 times per week. You should get instruction on how to do these exercises if you are not sure, from a physiotherapist or personal trainer.

If you have arthritis these guidelines are no different. It is extremely important that you exercise.

Pilates based exercise helps to strengthen core muscle groups that control posture and joint loading.

Most patients will benefit from being assessed by a physical therapist to identify specific areas of muscle weakness that may be worked upon in addition to the above.

Gait retraining with a physiotherapist can be helpful for those with arthritis affecting knees and hips. APOS therapy is one form of this. Professor Speed usually selects patients who she feels are appropriate for this and will refer accordingly.

If you are a reluctant exerciser, find ways of getting motivated on a daily basis. For example, exercising with friends, joining clubs, using a step/activity monitor. Choose activities you enjoy rather than something that bores you.

There are few activities you need to avoid if you have arthritis. However, avoiding high impact exercise – e.g., running – is wise if you have lower limb arthritis.



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