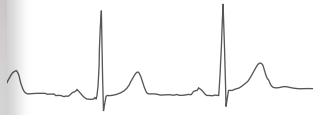




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Your cardiac and vascular health action plan

THE SUMMARY

- 01 Exercise and pump your heart
- 02 Know your healthy heart numbers and know your risks
- 03 Eat your heart out – eating for a healthy heart
- 04 Heart your family – don't ignore the relatives
- 05 Take the right supplements for the heart
- 06 Open your heart, get optimistic and develop lifelong friends, de-stress
- 07 Rest your heart – sleep, meditate



ACTION 1: EXERCISE AND PUMP YOUR HEART

For optimum health - burn between 3,500 and 6,500 calories a week (or from 500 to about 950 a day).

You also need about sixty minutes a week of stamina training - that is, a cardiovascular activity that elevates your heart rate to 80 percent or more of your age-adjusted maximum (220 minus your age) for an extended period of time.

The stamina training necessary to obtain optimum health (more is needed for getting into great shape but not needed for health) comes in the form of only three twenty-minute workouts per week at this heart rate.

There are a couple of reasons why exercise is so important.

- Reduces blood pressure. Firstly, any amount of physical activity lowers both systolic (the pressure being exerted when the heart contracts; the first or top number) and diastolic (the pressure in the arteries when the heart is at rest; the bottom or second number) blood pressure, which are the most important factors in arterial aging.

- Improves your cholesterol profile / Raises HDL. Even walking just a few extra minutes a day lowers your (LDL) cholesterol, raises your healthy (HDL) cholesterol, and decreases inflammation.
- Makes arteries healthier. The exercise may also strengthen blood vessels by forcing them to dilate and perhaps making them more elastic.
- Help prevent weight gain and is probably better than most drugs to prevent heart disease, depression and obesity.
- Stress and mental health management - exercise is better than anti-depressants!

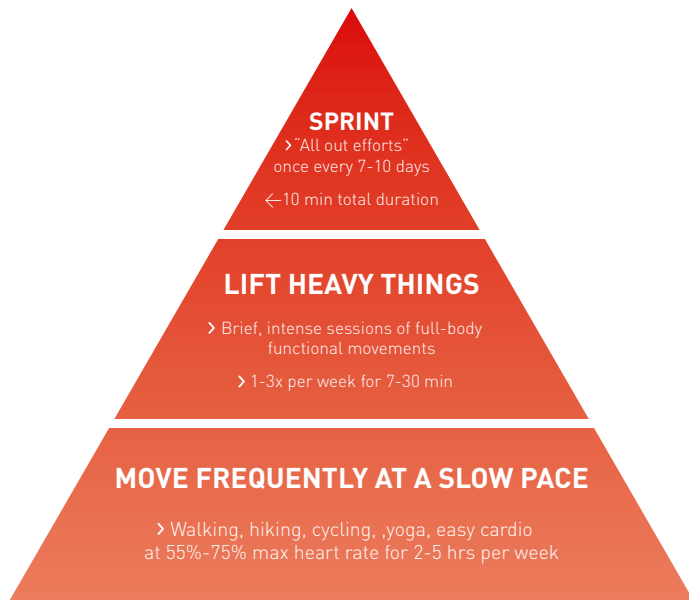
Find the time

Simply doing physical activity for twenty minutes is enough to make a difference - in your heart, your arteries, your bones, your joints, your attitude and your whole health.

To define that twenty minutes, it's twenty minutes of sustained activity that leads to you being slightly out of breath or enough for you to break a sweat during that time.

How to exercise

Individualize, if over 50 and embarking on a new program consider doing an exercise stress test beforehand. Combine Cardiovascular with functional movements, start out slowly. Include both Yang (high energy) and Yin (quieter more contemplative). Enjoy it.



ACTION 2 KNOW YOUR HEALTHY HEART NUMBERS, & YOUR RISKS

The more you have a handle on important levels in your body, the better you'll be able to measure your risk, predict heart problems and flag danger.

1 Blood pressure and arterial stiffness

Ideal is less than 120 systolic / 80 diastolic. After the age of 50, your BP becomes your most important CVS risk factor - especially the systolic, the higher your systolic BP, the greater your risk for stroke.

2 Blood tests

A yearly blood test will give insight into the state of your heart health.

Here's what to look for:

- **Cholesterol - L** for lousy, **H** for healthy.
- LDL cholesterol - The lower your LDL is - the lower your risk of developing coronary disease.
- High LDL levels can be the result of eating a lot of foods laden with cholesterol, simple carbohydrates and trans and saturated fats.

Or it can be partially determined by genetics: a tendency to have high LDL can run in families. Know your family history!

- LDL cholesterol needs to be tailored to your individual risk, however normal LDL levels should be below 3.6 mmol/L.

3 HDL Cholesterol – The good guys

You also want as high an HDL level possible and at least greater than 1.5.

Increasing your HDL can be done in several ways

- Consuming healthy fats like those in olive oil (one tablespoon), fish(100g) and walnuts/almond (twelve a day).
- Walking or doing any physical activity for thirty minutes a day.
- Having a drink of alcohol every night (red wine probably best- Resveratrol, beer OK too - Vitamin B6).
- Triglycerides – the fat content in your diet and blood. Aim less than 1.7 mmol/L.

High TG is associated with increased risk. Reduce with diet, fish oils, exercise and alcohol reduction .

4 C-Reactive Protein

Hs-CRP (Hs stands for high sensitivity) measures the level of inflammation in your body.

If it is high, your risk of heart disease is higher, because any significant inflammation in your body increases inflammation in your blood vessels.

5 Homocysteine

High homocysteine is associated with increased cardiovascular risks.

High homocysteine levels are easily reduced to normal by taking the vitamin folate (700 micrograms a day). You should aim for a normal homocysteine level.

6 Blood Sugar Levels

- Fasting Blood Sugar - Keep it lower than 5.6. The excess sugar in the blood that's caused by diabetes damages the arteries by inactivating substances that make it possible for your arteries to smoothly dilate and contract. Without these substances the risk of holes or cracks appearing at junctions in the arterial walls increases dramatically.
- Normal: Fasting blood glucose: 5.6 mmol/L.
- Pre-diabetes: Fasting blood glucose: 5.6-7.0 mmol/L.

- Diabetes: Fasting blood sugar: 7.1mmol/L or above.
- HBA1C- measures blood sugar over last 3 months – not greater than 6. → 6. = insulin resistance = precursor to diabetes.

The physical tests

1 Waist Size and BMI (Use together)

Too much of a waist can lead to heart disease, diabetes and even cancer. That's because excess abdominal, or omentum, fat pumps out toxic chemicals that not only keep you fat but also cause inflammation that poisons your organs, especially your liver.

To maintain optimal health, your ideal waist size should be less than half your height.

- **Women** - For the average woman 160 cm, waist size should measure 82 cm or less.
- **Men** - The waist of an average 178 cm man should measure 92 cm or less.

You can also calculate your body mass index. Often referred to as your BMI, your body mass index is a measure of your weight relative to your height.

A healthy BMI should fall between 19 and 25.

2 Your resting heart rate – below 90

Chronically elevated HR above 90 are associated with worse cardiac outcomes. A lower HR means you are fitter, less stressed and your heart is working more efficiently.

3 Heart Rate Recovery Time

The quicker your HR recovery during rest periods is, the fitter you are .

4 Coronary Calcium Score

The most important non-invasive test to predict future cardiovascular risk and maybe save your life:

If you are a male over 50 – ask your doctor about a coronary calcium score.

If you are female over 55 or postmenopausal ask about a coronary calcium score too.

ACTION 3: EAT YOUR HEART OUT – EAT FOR A HEALTHY HEART

It's becoming clearer every day that food is one of your most powerful tools for keeping your body (and especially your heart) in optimum condition.

Our bodies are not all equal but stick to some key fundamentals.

1 Go fishing

You should eat three portions of fish per week. Fish, especially fatty fish like salmon and whitefish like cod is high in those omega-3 fatty acids,

They appear to reduce triglyceride levels in the blood (high levels cause plaque buildup in the arteries), stabilize the heartbeat (reducing irregular rhythms) and make platelets less sticky (reducing clotting in arteries).

The best fish are wild, line-caught salmon (almost all canned salmon is wild, healthful salmon), sole, whitefish (cod).

2 Go nuts

Eat at least one handful of nuts a day. Nuts are an excellent source of both healthful fats and healthful protein; they also can be concentrated sources of flavonoids, an antioxidant.

The best nuts (those highest in omega-3 fatty acids) are walnuts, but all nuts - even legume peanuts - are good for you.

3 Just like your car use the good oils to keep things running smoothly

Olive oil contains monounsaturated fats, which helps raise your HDL cholesterol - the "healthy" cholesterol that is carried through your body by high-density lipoproteins. It actually helps clean out your arteries as it moves through.

4 Know your enemies

- 0g trans fats / day
- Limit your saturated and trans fats (a mostly artificial form of aging fat, that is really bad for us) to less than 20 grams a day.
- No food element has been more closely linked to arterial aging than these kinds of fats, found mostly in meats, full-fat dairy products, baked goods, fried fast foods, and palm and coconut oils.
- A maximum of 100 calories of added sugar a day.

Avoid simple sugars, including high fructose corn syrup and most white processed foods, which have a very direct bad effect on your arteries.

Simple sugars can also contribute to obesity or lead to insulin resistance and ultimately diabetes.

- Go LOW ON the Salt- High salt = High BP - Only 1.5g of sodium allowed daily (less than 1 teaspoon).

- 1 - 2 alcoholic drinks a day (1-2 alcohol free days a week). Too much is harmful.

ACTION 4: **HEART YOUR RELATIVES /** **DON'T IGNORE THEM**

The cardiovascular health of your first degree relatives are one of the most important factors in determining yours. If they have genetic (congenital) or acquired (developed as they grew older) heart disease, get yourself checked.

ACTION 5 **SUPPLEMENTS FOR THE HEART –** **THE TOP PICKS FOR YOUR HEART**

- **ASPIRIN** – If you are a man over 40 or a woman over 50 consider a baby aspirin a day (100mg). The decision to take an aspirin daily should be individualized and discussed with your doctor.
- **A Good MULTIVITAMIN** - with vitamins C, D, E, zinc and magnesium
- **FOLATE/B Vitamins**
- **Omega-3 Supplements** – Omega-3 fatty acids are cholesterol-clearing good fats (monounsaturated).

Omega-3 fats are essential fats. You need to eat good sources of fish (wild salmon, trout, sardines, anchovies, herring and mackerel) or take supplements in order to get the DHA.

Take an Omega 3 with at least 600mg DHA / day

- If you take statins / cholesterol lowering medication – take Co-enzyme Q10 200mg /day and Magnesium orotate.

ACTION 6: **OPEN YOUR HEART, GET MENTAL AND** **DEVELOP LIFELONG FRIENDS**

Avoid anger and hostility

Including learning relaxation techniques and meditation and having friends you'd never think of getting angry with can help you handle these damaging feelings in a healthier way.

Avoid depression

Depression is bad for the heart!

Seeking professional help and managing depression requires recognizing it in yourself or friends; getting help or helping your friends get help results in a more than 90 percent reduction in symptoms and consequences in just three months.

Seeking help, whether by taking and planning therapy or through medication, is a needed first step to help you and your heart.

De-stress

Stress is the greatest ager of your body in general, especially the nagging, unfinished-tasks kinds of stress that hang over you day after day, or the stress of things that are out of your control.

Just as chronic stress can damage your heart, actively working at reducing stress will keep your heart healthier.

The most consistent stress reducers that also help with heart disease, depression and anger include: exercising, meditating and nurturing friendships.

Develop a close circle of friends, eat together and hug often!

ACTION 7 **REST YOUR HEART - SCHEDULE SLEEP** **AND MEDITATE**

Sleep

If you get less sleep than you need, you increase your arterial aging and your risk of heart attack.

Optimal amount is seven to eight hours per night for men, and six to seven hours for women.

You have to be sleeping about two and a half hours in a row before your sleep becomes truly restorative.

Poor or inadequate sleep causes depression and bad lifestyle habits.

Ignoring bad sleep is like not fixing a hole in the roof!

Meditate

Mindfulness Meditation - non-judgemental, paying attention to the present moment with the breath, one pointedness, being in the here and now.

Breath. Be flexible. Come to know your mind and with practice change it. Use the physical sensation of the breath to bring you back to the present moment.

Practice. Practice. Practice.