List of vitamins and their sources pdf

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The Recommended Dietary Allowances (RDAs) for vitamins may be used as goals for each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamins may be used as goals for each person. How much of each vitamin most people should get each day. The RDA for vitamin most people should get each day. 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The RDA for vitamin most people should get each day. The RDA for vitamin most people should ge get all the daily vitamins you need is to eat a balanced diet that contains a wide variety of fruits, vegetables, fortified dairy foods, legumes (dried beans), lentils, and whole grains. Dietary supplements can be helpful during pregnancy and for special medical problems. If you take supplements, do not take more than 100% of the RDA unless you are under a provider's supervision. Be very careful about taking large amounts of fat-soluble vitamin supplements. These include vitamins A, D, E, and K. These can build up in your body and may cause harmful effects. Page 2Markell M, Siddigi HA. Vitamins and trace elements. In: McPherson RA, Pincus MR, eds. Henry's Clinical Diagnosis and Management by Laboratory Methods. 24th ed. Philadelphia, PA: Elsevier; 2022:chap 27.Mason JB, Booth SL. Vitamins, trace minerals, and other micronutrients. In: Goldman L, Schafer AI, eds. Goldman-Cecil Medicine. 26th ed. Philadelphia, PA: Elsevier; 2020:chap 205. Page 3A simple rash is called dermatitis, meaning inflammation of the skin. Contact dermatitis is a rash that appears in patches of redness and scaling around the eyebrows, eyelids, mouth, nose, trunk, and behind the ears. If it happens on your scalp, it is called dandruff in adults and cradle cap in infants. Age, stress, fatigue, weather extremes, oily skin, infrequent shampooing, and alcohol-based lotions aggravate this harmless but bothersome condition. Other common causes of a rash include: Eczema (atopic dermatitis) -- Tends to happen in people with allergies or asthma. The rash is generally red, itchy, and scaly, Psoriasis -- Tends to occur as red, scaly, patches over joints and along the scalp. It is sometimes itchy. Fingernails may also be affected. Impetigo -- Common in children, this infection is from bacteria that live in the top layers of the skin. It appears as red sores that turn into blisters, ooze, then for a honey colored crust over. Shingles -- A painful blistered skin condition caused by the same virus as chickenpox. The virus can lie dormant in your body for many years and re-emerge as shingles. It usually affects only one side of the body. Childhood illnesses such as chickenpox, measles, roseola, rubella, hand-foot-mouth disease, fifth disease, and scarlet fever. Medicines and insect bites or stings. Many medical conditions can cause a rash as well. These include: Page 4Dinulos JGH. Dermatologic surgical procedures. In: Dinulos JGH, ed. Habif's Clinical Dermatology: A Color Guide to Diagnosis and Therapy. 7th ed. Philadelphia, PA: Elsevier; 2021:chap 27.High WA, Tomasini CF, Argenziano G, Zalaudek I. Basic principles of dermatology. In: Bolognia JL, Schaffer JV, Cerroni L, eds. Dermatology. 4th ed. Philadelphia, PA: Elsevier; 2018:chap 0.Pfenninger JL. Skin biopsy. In: Fowler GC, eds. 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In: McPherson RA, Pincus MR, eds. Henry's Clinical Diagnosis and Management by Laboratory Methods. 24th ed. Philadelphia, PA: Elsevier; 2020:chap 162.Page 8Blood is made up of two parts: Fluid (plasma or serum) Cells Plasma is the fluid part of the blood in the blood cells, white blood cells, and platelets. Blood helps move oxygen, nutrients, waste products, and other materials through the body. It helps control body temperature, fluid balance, and the body's acid-base balance. Tests on blood or parts of blood may give your provider important clues about your health. Vitamins and minerals are nutrients your body needs in small amounts to work properly and stay healthy. Most people should get all the nutrients they need by having a varied and balanced diet, although some people may need to take extra supplements. This guide has information about: Use these links to find out what the risks are if you take too much There are 3 types of units used to measure amounts of minerals and vitamins: Milligrams – a milligram is 1 thousandth of a gram and is usually spelt out as mgMicrograms is equal to 1 milligram. International Units, which are sometimes used to measure vitamins A, D and E - and usually spelt out as IU. The conversion of milligrams (mg) and micrograms (µg) into IU depends on the type of vitamins and minerals are organic compounds that our bodies use in very small amounts for a variety of metabolic processes. Basically, they keep us healthy and help our bodies to function. We get vitamins and minerals from the foods we eat. For most of us, a healthy and variety of healthy unrefined foods. Vitamins and minerals can cause toxicity if consumed in large amounts. Types of vitamins and their functions Vitamins and minerals are a form of nutrients don't give us energy, they are involved in the metabolic processes that enable us to get energy from carbohydrates, protein and fat, which are also known as macronutrients. Different vitamins are to different purposes and contribute to different bodily functions. There are 13 vitamin A vi plant foods. Plant foods can be easy to spot as they tend to have orange/yellow pigment known as beta-carotene. Plant sources include: orange and yellow fruit and vegetables – such as spinach, peas and broccoli. Animal sources include: liver eggs some fortified milk and milk products (with added vitamin A). Vitamin A deficiency risks Because of the various roles that vitamin A plays in the body, deficiency can have several health effects. These include: increased risk of infections night blindness and irreversible blindness (xeropthalmia) excessive keratin build-up of the skin Vitamin B B-group vitamins help our bodies use the energy-yielding nutrients (such as carbohydrates, fat and protein) for fuel. Some B-group vitamins are needed to help cells to multiply by making new DNA. Except for B-12 and folate which are stored by the liver, most B-group vitamins can't be stored by the body. They must be consumed regularly in a healthy diet that includes a range of wholefoods (such as lean meat, fish, wholegrains, fruit, vegetables and legumes) and limits the intake of alcohol and processed foods. The 8 types of vitamin B are: thiamin (B1) riboflavin (B2) niacin (B3) pantothenic acid (B5) pyridoxine (B6) biotin (B7) folate or 'folic acid' when included in supplements (B9) cyanocobalamin (B12). A person who has a poor diet for a few months may end up with B-group vitamins deficiency. For this reason, it's important that adequate amounts of these vitamin C (from food and drinks) is essential, because the human body cannot make this vitamin from other compounds. We also need to have vitamin C as a regular part of our diet because the body cannot store vitamin C for very long. Vitamin C (ascorbic acid) is important for many metabolic processes, including: Collagen formation – collagen is used in different ways throughout the body. Its primary role is to strengthen the skin, blood vessels and bone. The body also relies on collagen to heal wounds. Antioxidant function—the metabolism of oxygen within the body releases molecular compounds called 'free radicals', which damage cell membranes. Antioxidants are substances that destroy free radicals, and vitamin C is a powerful antioxidant. Iron absorption - the process of iron absorption is aided by vitamin C, particularly non-haem iron (found in plant foods such as beans and lentils). Infection fighting - the immune system, particularly non-haem iron (found in plant foods such as beans and lentils). brain chemicals (neurotransmitters). Dietary sources of vitamin C adults need about 45mg of vitamin C and any excess amount (above 200mg) is excreted. Vitamin C and any excess amount (above 200mg) is excreted. Vitamin C and any excess amount (above 200mg) is excreted. lemons, limes, grapefruits, blackcurrants, mangoes, kiwifruits, rock melon, tomatoes and strawberries vegetables - particularly green vegetables - particularly green vegetables (such as cabbage, capsicum, spinach, Brussels sprouts, lettuce and broccoli), cauliflower and potatoes. Vitamin C deficiency and scurvy A severe lack of vitamin C can lead to scurvy. We may think of it as a disease of the past, but it does still exist. Factors or lifestyle issues that may increase your scurvy risk include: regularly eating unhealthy foods crash dieting – especially being on diets that exclude certain food groups being malnourished due to inadequate care very strict allergy diets having an eating disorder smoking – smokers need more vitamin C to cope with the extra stress on their body. Scurvy symptoms The onset of symptoms of scurvy depends on how long it takes for the person to use up their limited stores of vitamin C. Scurvy is usually easy to treat – symptoms are like many other mild complaints and may include: fatigue and generally feeling unwell loss of appetite nausea and diarrhoea fever painful joints and muscles small 'pinpoint' bleeding around hair follicles visible in the skin. If you or someone you care for is at risk, please see your doctor. Vitamin D is important for strong bones, muscles and overall health. Ultraviolet (UV) radiation from the sun is necessary to produce vitamin D in the skin and is the best natural source of vitamin D. Regular physical activity also assists with the body's production of vitamin D. Spending too much time in the sun may increase your risk of skin cancer. Remember to use daily sun protection, especially at times when UV index levels are at their highest (3 or above). Food sources of vitamin D Only a small amount (around 5-10%) of Vitamin D deficiency It is important to achieve a good peak bone mass early in life. Vitamin D deficiency can result in a decline in bone density in adult life, increasing the risk of: Treatment options include improved sunlight exposure, diet, exercise, vitamin D levels, see your GP. Your GP may recommend vitamin D supplements. If you are concerned about vitamin E vitamin D supplements. If you are concerned about vitamin D supplements vitamin D supplements. against damage from free radicals, such as exposure to cigarette smoke or radiation. It is also important for our: vision immune system skin. Dietary sources of vitamin E is also vulnerable to heat (especially cooking methods such as deep frying. Dietary sources include: Vitamin E deficiency Deficiency is rare but can happen in people with diseases that cause fat malabsorption (like cystic fibrosis). Erythrocyte haemolysis is another deficiency – it's seen in infants born before vitamin E is transferred to them from their mother prior to birth. Vitamin K vitamin K is important for: healthy bones blood clotting and wound healing newborn babies to prevent a serious bleeding condition called haemorrhagic disease of the newborn (HDN). Dietary sources of vitamin K we get vitamin K levels because they are born without bacteria in their gastrointestinal tract. We get much of our vitamin K deficiency Vitamin K deficiency Vitamin K deficiency is unlikely except when fat is not absorbed properly or when certain medications are used. For example, antibiotics can kill the gastrointestinal bacteria that produce vitamin K. Additionally, anticoagulant drugs (or blood thinners) may cause problems with vitamin K in the body. Check with your doctor if you have any concerns. Types of minerals and their functions There are hundreds of minerals – they are usually classified as either major or trace minerals. Although the amount you need differs between minerals, major (or macrominerals) are generally required in larger amounts. Some examples include calcium, phosphorus, potassium, sulphur, sodium, chloride, magnesium. Trace minerals (microminerals) are generally required in larger amounts. required in smaller amounts. Examples include iron, zinc, copper, manganese, and iodine selenium. Some of the important minerals to keep our bones strong and healthy are listed below. Calcium is vital to keep our bones strong and healthy are listed below. Calcium is vital to keep our bones strong and healthy are listed below. osteoporosis. Calcium helps: strengthen bones and teeth regulate muscle and heart function blood clotting transmission of nervous system messages enzyme function. Food sources of calcium supplements. Good sources of calcium include dairy foods like milk, yoghurt and cheese and some plant-based foods with added calcium (for example, soymilk, tofu and breakfast cereals). Other sources of calcium include almonds, bok choy, kale, parsley, broccoli and watercress. Iodine Iodine is essential to make thyroid hormones. These hormones control your metabolic rate (the rate your body uses energy when it is resting). They also help your brain and body grow and develop. Food sources of iodine in our diet. Iodine is found in iodised salt. All bought breads (except organic) in Australia are fortified with iodised salt. You are likely to be getting enough iodine through your diet. However, if you are deficient and need to take a supplement, be guided by your doctor. Too much iodine can be harmful, especially if you have an underlying thyroid disorder. Iron Iron is an important mineral that is involved in various bodily functions, including the transport of oxygen in the blood the provision of energy to cells. It also vital to help our immune system function effectively to fight infection. Food sources of iron Iron deficiency Iron deficiency is common and can affect adults and children. Around one in 8 people do not consume enough iron to meet their needs. Some factors such as certain foods and drinks can affect how much iron your body absorbs. Also, some groups are more at risk of iron deficiency, such as babies and young children, teenage girls, women with heavy periods, vegans and vegetarians and people with chronic conditions. Zinc Zinc is an important mineral involved in various bodily functions. Zinc also helps to produce the active form of vitamin A and transports it around the body. Food sources of zinc Zinc is highest in protein-rich foods but may also be found in some plant foods. Dietary sources include: red meat shellfish poultry milk and cheese whole grains cereals with added zinc. Magnesium Magnesium also supports immune function and helps regulate blood pressure and lung function. Food sources of magnesium Dietary sources include: nuts (such as cashews) legumes dark green vegetables seafood whole grains chocolate and cocoa. Potassium Dietary sources of potassium Our bodies are designed for a highpotassium diet, not a high-salt diet. Food processing tends to lower the potassium levels in many foods while increasing the sodium content. It is much better to eat unprocessed foods – such as fruit, vegetables and lean meats, eggs, fish and other healthy, everyday foods. Foods high in potassium include: bananas and apricots mushrooms and spinach nuts and seeds. Be guided by your doctor, some people with kidney disease, or who are taking some medications, need to be careful not to get too much potassium in their diet. Sodium A small amount of sodium is important for good health as it helps to maintain the correct volume of circulating blood and tissue fluids in the body. Most of us are consuming far more sodium than we need. In fact, many Australians are consuming almost double the amount required. Too much sodium can lead to high blood pressure (hypertension) and other health conditions. Food sources of sodium in our diet. It is a chemical compound (electrolyte) made up of sodium and chloride. Many foods - wholegrains, meat and dairy products - naturally contain small amounts of sodium, while highly processed foods usually contain large amounts. Vitamin and mineral deficiencies and supplements The fat-soluble vitamins A, D, E and K can be locked away in the liver and body fat, and stored for a long time. The water-soluble vitamins, including B-complex and vitamin C, are mostly only stored for a shorter period. A vitamin deficiency takes weeks or months before it will affect your health. For instance, it would take months of no vitamin C before you developed scurvy.

