# FOOD AND NUTRIENTS MONE SHOULD KEEPIN MIND AT EACH LIFE STAGE

Based on age, women should make sure they get enough of certain nutrients and foods in their diets to support their health. This guide provides the reasoning for specific nutrient needs, along with which foods, to keep in mind at each stage of a woman's life.

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# **REPRODUCTIVE AGE:**

#### **Iron-Rich Foods**

Iron is a mineral that is required to carry enough oxygen throughout the body.<sup>1</sup> In women of childbearing age, a common cause of iron-deficiency anemia is a loss of iron in the blood during heavy menstruation or pregnancy. In addition, poor diet or certain intestinal diseases that affect how the body absorbs iron can also be contributing factors to iron-deficiency anemia.

A female of reproductive age should aim for 18 mg of iron in her diet each day.

# **IRON-RICH FOODS:**<sup>1</sup>



White beans – 1/2 cup: 4 mg









Cooked spinach – 1/2 cup: 3 mg









#### **SERVINGS:** 2 servings

# **TOFU SCRAMBLE WITH LENTILS & SPINACH**

#### **INGREDIENTS:**

**1.5 TSP BECEL® VEGAN SPREAD** 2 STALKS GREEN ONION, CHOPPED 2 GARLIC CLOVES, MINCED 14 OZ TOFU, CRUMBLED **1TBSP** NUTRITIONAL YEAST **1TSP** TURMERIC 1/2 TSP CUMIN 2 CUPS LENTILS, COOKED 2 CUPS BABY SPINACH, COOKED

#### **INSTRUCTIONS:**

- 1. Heat the Becel<sup>®</sup> Vegan spread in a skillet over medium heat. Add the green onion and garlic and sauté for one minute, stirring occasionally.
- 2. Add the tofu, nutritional yeast, turmeric, and cumin to the skillet. Sauté for five minutes, stirring occasionally.
- 3. Add the lentils and spinach to the skillet. Cook for another three to four minutes or until the spinach wilts. Enjoy!

#### **Folate-Rich Foods**

Folate is a B vitamin required to make new cells.<sup>2</sup> During pregnancy, folate helps to form the neural tube which develops into the baby's brain and spinal cord. All women capable of becoming pregnant should obtain adequate amounts of folate to reduce the risk of neural tube and other birth defects.

A female of reproductive age should aim for 400 mcg dietary folate equivalent per day.

# **FOLATE-RICH FOODS:**<sup>2</sup>



# **PREGNANCY:**

#### **Choline-Rich Foods**

Choline plays a role in a fetus' brain development and may help prevent some common birth defects.<sup>3</sup> Choline affects physiological processes during the prenatal period, including membrane biosynthesis and tissue expansion, neurotransmission, brain development, methyl group donation, and gene expression. Although the body produces some choline on its own, it does not make enough to meet all of a woman's needs while she is pregnant and choline is not found in most prenatal vitamins. Therefore, experts recommend that pregnant women get 450 mg of choline each day.

# **CHOLINE-RICH FOODS: 3**



Soybeans – 1/2 cup: 107 mg





Potatoes – 1 large: 57 mg





Quinoa – 1 cup cooked: 51 mg



#### Omega 3-Rich Foods

Studies show that omega-3 fatty acids may offer a number of benefits during pregnancy, including supporting brain and eye development in babies and helping to prevent preterm birth.<sup>4</sup> Omega-3s may even help reduce depressive symptoms in women with perinatal depression, some research suggests.<sup>5</sup> Experts advise that pregnant women aim for around 1.4 mg of omega-3s per day.

# **OMEGA-3-RICH FOODS: 5**

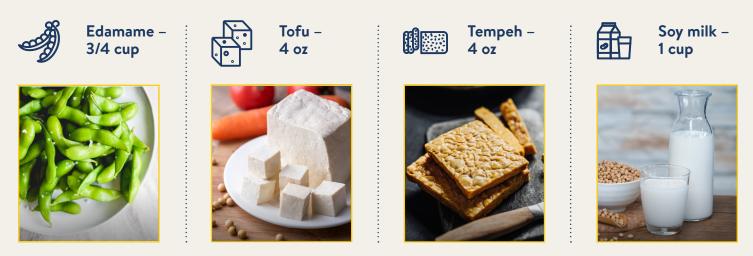


### **MENOPAUSE:**

#### Soy

A compound in soy called soy isoflavones may help reduce hot flashes and night sweats that many women have during menopause. In clinical studies, menopausal women who eat high amounts of dietary soy protein (20 to 60 g per day) generally have fewer and less intense hot flashes and night sweats than menopausal women who eat less soy isoflavones.<sup>6</sup>

# FOODS CONTAINING SOY ISOFLAVONES:



#### Legumes

The risk of cardiovascular disease increases as a woman transitions through menopause. As women produce less estrogen, they accumulate more belly fat. Excess abdominal fat is part of a cluster of symptoms that becomes more common after menopause. When a woman has at least three of the following characteristics, she is deemed to have metabolic syndrome, which increases the risk of heart disease, stroke, and type 2 diabetes: abdominal obesity; high triglycerides; low "good" HDL cholesterol; high blood pressure or high blood sugar.<sup>7</sup>

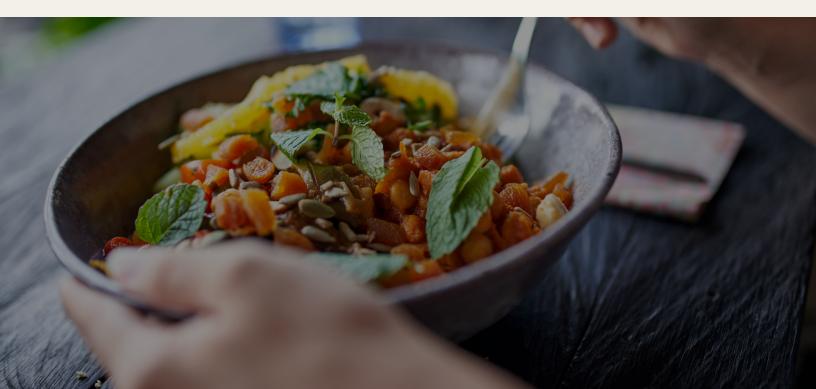
To help reduce the risk of heart disease, a woman going through menopause can incorporate legumes into her diet. Legumes contain fibre and potassium for heart health, and no saturated fat, trans fat, or cholesterol.

There are several possible mechanisms that may explain the cholesterol-lowering effects of legumes:

- 1. Saturated fat displacement from the diet
- 2. Viscous fibres binding to dietary cholesterol in the intestine
- 3. Interruption of bile acid enterohepatic circulation
- 4. Inhibition of endogenous cholesterol synthesis by short chain fatty acids

# TYPES OF LEGUMES (ONE SERVING = <sup>1</sup>/<sub>4</sub> CUP):





# **POST-MENOPAUSE:**

#### Increased Calcium and Vitamin D-Rich Foods:

Osteoporosis is more common after menopause.<sup>8</sup> Estrogen helps to make and rebuild bones. A woman's estrogen levels drop after menopause and bone loss speeds up. Post-menopausal women should aim for 1200 mg of calcium daily. Importantly, it is recommended that women get this amount of calcium through diet as ingesting excess calcium supplements can lead to negative effects, such as gastrointestinal distress and medication interference.

# **CALCIUM-RICH FOODS:**<sup>8</sup>



Tofu with calcium – 0.5 cup: 435 mg





Non-dairy milk (almond/soy) – 1 cup: 300-450 mg





Cooked dark leafy greens – 0.5 cup cooked: 50-135 mg



#### Vitamin D

It is also recommended that post-menopausal women consume at least 800 IUs of Vitamin D per day to help combat bone loss.

# **VITAMIN D-RICH FOODS: 8**



Non-dairy milk (almond/soy) – 1 cup: 100 IU





Mushrooms exposed to UV light – 85 g: 900 IU





Becel® Vegan (2 tsp) – 2 ug





### SERVINGS: 2 servings

# CREAMY EDAMAME & MUSHROOM PASTA

#### **INGREDIENTS:**

1/2 CUP MACARONI ELBOWS, UNCOOKED 1 TBSP BECEL® VEGAN SPREAD 1 CUP MUSHROOMS, SLICED 1 CUP UNSWEETENED ALMOND MILK 2 TSP ONION POWDER 1 TSP GARLIC POWDER 2.5 TBSP FLOUR 1/2 CUP FROZEN PEAS 1/2 CUP FROZEN EDAMAME 2 CUPS BABY SPINACH, CHOPPED

#### **INSTRUCTIONS:**

- Bring a large pot of water to a boil and cook the macaroni elbows per the directions on the package. When finished cooking, strain and run under cold water immediately to prevent from overcooking.
- 2. Meanwhile, heat the Becel® Vegan in a large skillet over medium heat. Add mushrooms and cook, stirring occasionally, until soft. Set mushrooms aside.
- 3. In the same saucepan over medium heat, add almond milk, onion powder, garlic powder, and flour. Bring to a boil, whisking occasionally.
- 4. Reduce heat and let simmer for 15 minutes, stirring occasionally until the sauce becomes thicker.
- 5. Add mushrooms, peas, edamame, and spinach. When sauce is simmering again and spinach has wilted, add pasta and stir until well coated. Divide into bowls and enjoy!

For optimal health, a woman should be more conscious on meeting their required intake of certain nutrients and foods during different stages of her life cycle. This guide should serve as a handy reference to help her do so.



# NICOLE OSINGA

Nicole is a Registered Dietitian and a Certified Diabetes Educator in Canada, with Masters and undergraduate degrees in Human Nutrition. She has her own one-on-one counselling practice with a focus on weight and chronic disease management. She also works part-time at a community hospital covering the cancer care and rehabilitation units. Nicole is currently a member of the 2023 Becel Centre for Heart Health Steering Committee, a team of registered dietitians working to create practical and relevant content relating to heart health.

<sup>1</sup> National Institutes of Health. June 15, 2023. Iron. Retrieved from <u>Iron - Health Professional Fact Sheet (nih.gov)</u> Sourced June 24, 2023.

<sup>2</sup> National Institutes of Health. November 30, 2022. Folate. Retrieved from <u>Folate - Health Professional Fact Sheet (nih.</u> <u>gov).</u> Sourced June 24, 2023.

<sup>3</sup> National Institutes of Health. June 2, 2022. Choline. Retrieved from <u>Choline - Health Professional Fact Sheet (nih.gov)</u>. Sourced June 24, 2023.

<sup>4</sup> Agency for Healthcare Research and Quality. May 18, 2015. <u>Omega 3 Fatty Acids and Maternal and Child Health.</u> <u>Retrieved from Omega 3 Fatty Acids and Maternal and Child Health | Effective Health Care (EHC) Program (ahrq.gov).</u> Sourced June 24, 2023.

<sup>5</sup> National Institutes of Health. February 15, 2023. Omega-3 Fatty Acids. Retrieved from Omega-3 Fatty Acids - Health Professional Fact Sheet (nih.gov). Sourced June 24, 2023.

<sup>6</sup> The Journal of The North American Menopause Society. October 2021. The Women's Study for the Alleviation of Vasomotor Symptoms (WAVS): a randomized, controlled trial of a plant-based diet and whole soybeans for postmenopausal women. Retrieved from <u>https://journals.lww.com/menopausejournal/Fulltext/2021/10000/The</u><u>Women. s. Study. for the Alleviation of Vasomotor 12.aspx</u>. Sourced June 24, 2023.

<sup>7</sup>AHA Journals. November 30, 2020. Menopause Transition and Cardiovascular Disease Risk: Implications for Timing of Early Prevention: A Scientific Statement From the American Heart Association. Retrieved from <u>Menopause Transition</u> and Cardiovascular Disease Risk: Implications for Timing of Early Prevention: A Scientific Statement From the American <u>Heart Association | Circulation (ahajournals.org)</u>, Sourced June 24, 2023

<sup>8</sup> UpToDate. June 12, 2023. Patient education: Calcium and vitamin D for bone health (Beyond the Basics). Retrieved from Patient education: Calcium and vitamin D for bone health (Beyond the Basics) - UpToDate. Sourced June 24, 2023.



