




Nutrition Strategies to Manage the Various Stages of Menopause in an Active Woman's Life




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Today's Outline

- ✓ Weight Management during Menopause
 - ✦ Calorie requirements as women age
 - ✦ Healthy balance of carbs, proteins & fats
- ✓ Reducing Risks for:
 - ✦ Heart Disease
 - ✦ Breast Cancer
 - ✦ Osteoporosis
- ✓ Other Dietary Considerations
 - ✦ Mediterranean Diet
 - ✦ Antioxidants (Phytochemicals)
- ✓ Supplements you may consider

- **PeriMenopause** "around menopause"
 - 3-10yrs before menopause
 - Symptoms start to occur but monthly period still occurs (may be lighter, shorter, skipped, heavier)
- **Menopause**
 - Approx age of Canadian woman is early 50's
 - When 12 months have passed since your last period
 - Ovaries no longer produce significant amounts of estrogen & progesterone and don't release eggs
- **PostMenopause**
 - Estrogen levels reduced – affects energy level, bone density, muscle mass, sex drive
 - Increased risk of developing heart disease, osteoporosis & breast CA



Stages of Menopause


- Each person experiences it in their own unique way
- A natural event that occurs for every woman when her ovaries produce less sex hormones and she moves out of her reproductive stage
- **Fluctuating levels of estrogen & progesterone cause:**
 - Up to 80% of women - hot flashes, night sweats
 - Up to 60% - sleep disturbances
 - Up to 35% mood swings
 - Up to 39% vaginal dryness
 - Headaches, forgetfulness
 - Fluid retention
 - Unwanted weight gain, changes to body shape

Protecting your long-term health

- Hormone Therapy & other options available for menopause symptoms. Speak with your doctor about what is right for you. Learn about the evidence, the beneficial effects & the possible side effects

Around Menopause - (reduced levels of estrogen & progesterone)

- ✓ Increased weight gain potential
- ✓ Loss of lean muscle tissue
- ✓ Blood cholesterol levels may creep up - Heart disease risk
- ✓ Increased Breast Cancer Risk – years of estrogen exposure
- ✓ Loss of bone density – Osteoporosis risk




Protecting your long-term health Managing your weight



- "I used to be able to just add a little exercise or cut back a bit to manage my weight." It's more of a struggle now!!
- "Shifting body fat" Even if the scale weight doesn't change, reduced levels of estrogen impact your body weight & shape
- Estrogen may help to prevent body fat accumulation around the waistline
- **Apple vs Pear shape** - Increases health risks for heart disease, stroke, type 2 diabetes, sleep apnea

Managing your weight ...cont'd


- Our metabolism slows with age / loss of lean muscle tissue
Staying active (weight/resistance training) helps to maintain muscle mass & have a higher calorie-burning body
- As we age, we need to consume fewer calories than we did when we were younger



Estimated Daily Energy Requirements

Health Canada

Age	Sedentary (Calories/day)	Low Activity (Calories/day)	Active (Calories/day)
19-30	1900	2100	2350
31-50	1800	2000	2250
51-70	1650	1850	2100
71+	1550	1750	2000




Wanna go to Earls?

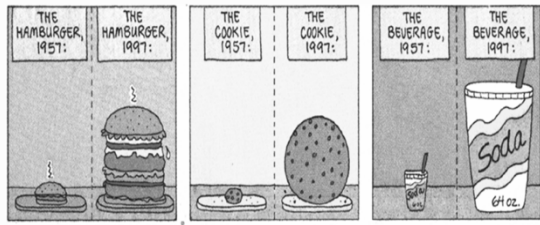
Menu Item	Calories
Chicken & Wontons	850
Dynamite Roll	740
Calamari	890
Caesar Salad	570
Warm Kale Salad	790
Jeera Chicken Curry with Naan	1370
Hunan Kung Pao with Chicken	1180
9 oz glass of wine	210

EVERYTHING you do to lose the weight... must be what you CONTINUE to do to keep it off!! (Leslie Beck)

- If want to lose weight.....Set a realistic weight loss goal
Be happy with 5-10 lbs loss vs too large/unrealistic loss
- Think **long-term changes** vs a short-term 'quick fix' goal.
Don't try "diets" but rather change **behaviors** that you know will make a difference
- **1-2 lbs lost/wk.** If faster than that, you are losing some muscle, fat & fluid and muscle loss is already on the decline. Less muscle also means reduced calorie burning





Portions...Portions...Portions





Healthy Daily Eating Practices to Help Manage Weight

- ✓ Eat at regular intervals – max of 4-5hrs between eating to prevent hunger
- ✓ **Small portions!** Shrink the size of your plates, bowls, cups you eat from
- ✓ **Snack wisely.** Eat filling foods. Balance your plate
- ✓ Watch portion with supper & night time...less calories burned into evening hours
- ✓ Watch alcohol frequency & amount

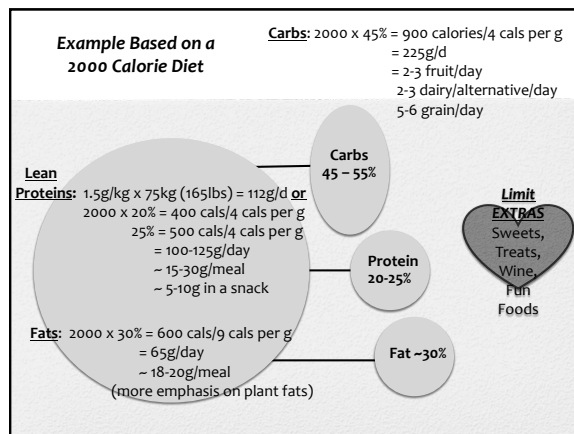
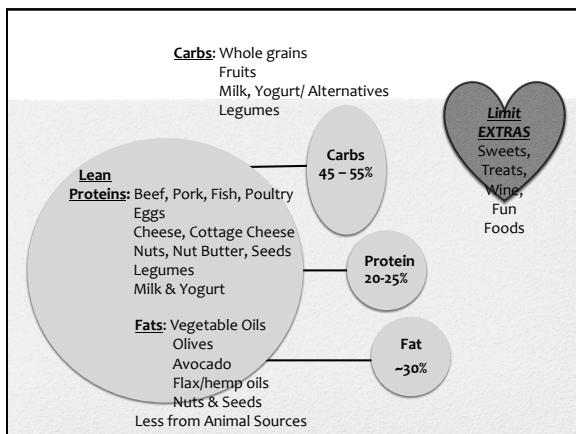


Healthy Daily Eating Practices to Help Manage Weight

- ✓ **Include protein source with each meal** for satiety & muscle preservation
- ✓ **Small inclusion of whole grains with meals**
Fist size max (1/2 – 1 cup serving)
- ✓ **Inclusion of Fruits, veggies, dairy/calcium sources**
- ✓ Limit excess sugars, refined/processed foods.
Keep treats out of house
- ✓ Treat yourself occasionally. Deal with lapses – we all have them!
- ✓ **Positive self-talk ☺**



FOODS	Calories	Carbs	Fat	Protein
Breakfast				
Albertsons - Bananas, 0.5 banana	53	14g	0g	1g
Liberte - 2% Plain Greek Yogurt, 175 g	120	6g	4g	16g
Raspberries - Raw, 0.5 cup	32	7g	0g	1g
Almond Fresh - Almond Milk Unsweetened, 0.5 cup	18	1g	2g	1g
Strawberries, raw, 0.75 cup, halves	38	8g	0g	1g
Kraft Canada - Peanut Butter (Smooth), 1 Tbsp	90	4g	6g	3g
Flax Powder - Flax Seeds Ground, 1 T	35	2g	3g	2g
Lunch				
584				
Bread - Pita, whole-wheat, 1 pita, large (8-12" dia)	170	35g	2g	6g
Generic - Raw Vegetable Mix, 0.5 cup raw	80	0g	0g	0g
Cheese - Feta, 0.25 cup, crumbled	99	2g	6g	5g
Generic Chicken Breast - Boneless, Skinless Breast, 2 oz	89	0g	0g	16g
Kraft Salad Dressing (Canada) - Greek With Feta & Oregano	68	2g	7g	0g
Calorie - Wise, 1.5 tsp				
Dinner				
676				
Dempsters - 100 % Whole Wheat Hamburger Buns, 1 bun (56g)	130	26g	3g	5g
Broccoli Steamed - Broccoli Steamed (Plain), 1 Cup	54	12g	0g	4g
Homemade - Chicken Chili (Lean Ground Chicken, Kidney Beans, Tomatoes, Onions), 1 1/2 cups	280	27g	4g	31g
Red Wine - Glass 6oz - Dry Red, 6 fluid oz	147	0g	0g	0g
Snacks				
611				
Pears - Asian, raw, 1 fruit 2-1/4" high x 2-1/2" dia	51	13g	0g	1g
Onville Redenbacher's - Microwave Popcorn Single Serve (Smart Pop), 1 mini bag	100	18g	0g	3g
Sunkist - Pistachios, 1/2 cup without shells	170	8g	14g	6g
Fibre 1 bar - 100 Cal, 1 bar	100	19g	3g	1g
TOTAL:	4,822	211g	88g	102g



Protein content of a meal

Include: 15-30g protein per meal



Meal: 2 whole grain bread = 8g
 ½ can salmon = 8g
 175g Greek yogurt = 15g
 1 apple = 2g
 ¼ sand bag of veggies = 2g
35g protein

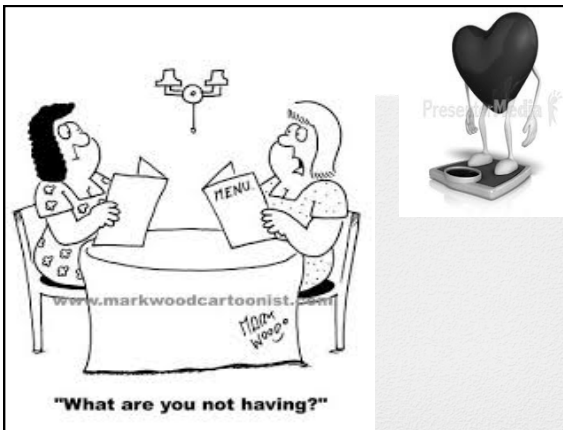


Protein content in common foods:

Food	Serving	Protein (g)	Food	Serving	Protein (g)
Chicken Breast	4 oz	27	Tofu, soft	1 cup	10
Fish	4 oz	23	Tofu, firm	1 cup	20
Egg/2 whites	1	7	Greek yogurt	¼ cup	15
Legumes	1 cup	14	Regular yogurt	1 cup	8
Beef	4 oz	19	1½ cottage cheese	½ cup	15
Soy milk	1 cup	7	Almond butter	2 Tbsp	6
Skim milk	1 cup	8	Peanut butter	2 Tbsp	6
1oz/cheese string	1	6	Cooked veggies	½ cup	2-3
Brown rice	1 cup	5	Kashi cereal	1 cup	11
Oatmeal cooked	1 cup	6	Lara bar	48g	7
Nuts	2 Tbsp	7	Kashi granola bar	1 bar	6
Soybeans	½ cup	11	Quinoa	1 cup	8
Sardines	2.6oz	20	Protein powder	1 scoop	20-30
Can'd tuna/salmon	30g	8	Protein bar	1	8-25

Foods containing 15 grams of carbohydrate (Include 2-4 servings/meal)

Food	Serving	Food	Serving
fruit	Tennis ball size	slice bread/medium muffin	1
banana	1 small	bun/English muffin	½
melon or blueberries	1 cup	rice/sweet potato	1/3 cup
raspberries/strawberries	2 cups	potato/pasta/corn/quinoa/barley	½ cup
kiwi or plum	2	pieces of sushi/nigiri roll	3
grapes or cherries	12-15	pita / 6"naan bread tortilla	½
grapefruit/mango	½ cup	oatmeal /cold cereal	½ - ¾ cup
fruit juice	½ c	Triscuits /rectangle Melba	4-5
raisins or dried cranberries	2 Tbsp	waffle/pancake (4 inch)	1
milk/soy/almond chocolate/flavored milks	1 cup ½ cup	popped popcorn	3 cup
no sugar added yogurt regular yogurt/Greek yogurt	¾ cup ½ cup	plain granola bar medium bagel	1 ½
milk/cream/pasta/rice soup hummus	1 cup 2/3 cup	soda/Ritz crackers Graham crackers	7 3
legumes (chickpeas, lentils, black beans, etc)	1 cup	"Treats": tortilla chips small cookies stick of licorice ice cream	12 2 1 ½ cup



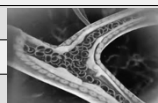
Protecting your long-term health –

Reducing Heart Disease Risk


- Men 10-15yrs earlier risk than women
- **Protective/delayed risk is due to estrogen** so with estrogen loss, woman's risk of getting heart disease increases 4-fold after menopause
- With aging/less estrogen, **body less efficient at clearing cholesterol from blood & vessels become less flexible**
- Cells in lining of blood vessels contain LDL receptors that remove cholesterol. **Body produces fewer receptors with less estrogen. LDL cholesterol levels then rise**
- Aging also increases weight gain risk & high blood pressure – also risk factors for heart disease & damage to the vessels

Are you at risk of heart disease?

Non-Modifiable Risk Factors	Modifiable Risk Factors
50+ years old	High cholesterol (LDL) levels
At or past menopause	Low HDL cholesterol
Family history (parent) of CVD before 55 yrs for father & 65 yrs for mother	High blood triglyceride levels
	Poor diet – higher protein, fat, sodium Higher processed foods
	Smoking
	High blood pressure
	Low exercise
	Overweight/Obese/BMI >25
	Diabetes



Reducing Heart Disease Risk





- **Regular exercise** can boost HDL, reduce LDL & strengthen the heart
- **Antioxidants** (from plant foods) - reduces LDL from sticking to artery walls & causing damage from free radicals (highly reactive oxygen molecules produced by normal body processes, smoking, pollution)
- Antioxidant enzymes produced by body, however levels decline with age


The colorful world of Phytochemicals

Carotenes (DEEP ORANGE)	Reduce free radicals & cancer promoters	Squash, pumpkin, mango sweet potato, carrots, cantaloupe
Lycopene (RED)	Inhibit cancer cell growth Stimulates immunity Blocks free radicals	Tomato/tomato prod'ts watermelon, grapefruit
Anthocyanins (PURPLE)	Heart health influences	Blueberries, beets, grapes, cherries, cabbage
Cryptoxanthin (ORANGE)	Antioxidant & tumour suppression	Peach, carrots, nectarines, tangerines, papaya
Lutein Zeaxanthin (DARK GREENS)	Free radical effect especially for eye health	Green beans, peas, peppers, spinach, romaine, kiwi, honeydew

Dietary Fats & Cholesterol

- ✓ Unsaturated, Saturated & Trans fats
- ✓ Cholesterol



- **Good** for you... unsaturated fats (plants)
- **Less healthy** for you....saturated (animals)
- **Worst** for you..... trans (hydrogenated, processed)
- May affect some of you..... Cholesterol (animals)

Sources of Dietary Fat

Choose healthier fats "that give back" *but watch amounts*

<p>Beneficial Fat Sources</p> <p><u>(unsaturated)</u></p> <p>Nuts and seeds </p> <p>Fish & Fish Oil</p> <p>Olive Oil, Olives</p> <p>Ground Flax & Flaxseed Oil</p> <p>Chia & Hemp seeds</p> <p>Non-hydrogenated margarine</p> <p>Avocado </p>	<p>Less Healthy Fat Sources</p> <p><u>(saturated & trans)</u></p> <p>Meat, pork, poultry </p> <p>Dairy</p> <p>Butter & hard margarine</p> <p>Coconut oil</p> <p>Hydrogenated Foods</p> <p>Fried Foods</p> <p>Pastries</p> <p>Baking & desserts </p>
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Best Omega 3 Food Sources














Dietary Cholesterol sources

- **Animal foods**

(anything that has a liver to produce it):

- Organ Meats
- Beef
- Poultry
- Pork
- Butter
- Shellfish
- Eggs

Nutrition Facts Table

The information is based on a specific amount of food


The % Daily Value (DV) shows if there is a little or a lot of a nutrient. Based on 2000 calorie diet & % of max 100% limit

A % DV of 5% or less would be low in these nutrients and a 15% or more is high in these nutrients.

Amount	% Daily Value
Nutrition Facts Per 1 cup (264 g)	
Calories 260	
Fat 13 g	20%
Saturated 3 g + Trans 2 g	25%
Cholesterol 30 mg	
Sodium 660 mg	28%
Carbohydrate 31 g	10%
Fibre 0 g	0%
Sugars 5 g	
Protein 5 g	
Vitamin A 4%	Vitamin C 2%
Calcium 15%	Iron 4%


Additional Dietary Considerations to Reduce Heart Disease Risk

- ✓ **DASH diet** – Dietary Approaches to Stop Hypertension
8-10 fruits/veg, 2 low fat dairy, <2300mg sodium per day
- ✓ **Fibre – 25-35g/d** – Removes cholesterol from blood (oatmeal, oatbran, All Bran Buds, psyllium, legumes/beans, fruits, veg)
- ✓ **Whole grains** – vit E & minerals act as antioxidants against LDL oxidation
- ✓ **Nuts ¼ cup/d** – reduce LDL & improve blood vessel function
- ✓ **Tea** – 1-2 cups/d – antioxidant against artery hardening
- ✓ **Garlic** – Use in cooking; roasted - antioxidant, blood thinner



Additional Dietary Considerations to Reduce Heart Disease Risk

- ✓ **Plant Sterols** – 2g daily – Plant sterol margarine/ yogurt with added plant sterols/ milk alternatives
Naturally in soybean, corn, squash, veg oils & whole grains in smaller amounts
- ✓ **Soy protein** – 15-25g/d - lowers risk by increasing HDL, lowers BP, prevents oxidation, keeps vessels healthy
- ✓ **Alcohol** – 0-1/d – antioxidants in wine (5oz = 1 svg) & may increase HDL cholesterol, reduce blood clotting **BUT** increases triglycerides, weight gain, hot flashes, insomnia, breast CA relationship



Mediterranean Diet Pyramid



- Less Often: Meats and Sweets
- Weekly: Moderate Portions Poultry, Eggs, Cheese and Yogurt
- Often: at least Twice each Week Fish and Seafood
- Every Day: Base Each Meal Around these Foods Vegetables, Fruits, Whole Wheat Grains, Olive Oil, Beans, Nuts, Legumes and Seeds, Herbs and Spices
- Every Day: Be Physically Active; Enjoy Meals with Others
- In Moderation: Wine
- Every Day: Water

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If women controlled medicine 😊




The Manogram

Protecting your long-term health Reducing Breast Cancer Risk

❖ 1 in 8 chance of diagnosis in a woman's lifetime

Increases risk	
First-degree family history	
Longer estrogen exposure – menstrual cycle before age 12	- menstruation for 40+ yrs - never pregnant
Weight gain – Estrogen produced in fat cells	- Increases insulin requirements - a growth hormone
Alcohol – higher intake, higher risk	
* Saturated (animal) & trans fat intake. Higher fat intake overall	
* Red meat intake. Limit processed meats, smoked/cured meats	
* High heat cooking of meats (BBQ, broil, fry). Don't char/blacken meat	


Protecting your long-term health Reducing Breast Cancer Risk



Consider enhancing intake of:


Mediterranean-style diet - Recent study tracked 60,000 women x 2 decades. Excluded alcohol in analysis. 40% reduction in breast cancer diagnosis risk
Fish (omega 3) & Unsaturated (plant) fat intake. Lower fat intake overall.
Antioxidants - Fruits & veggies – 2-3 fruit & 1.5-2.5 cups veg/ day ++ color and variety - Green & black teas
Healthful eating (minimize processed foods & sweets/pastries/sugar drinks) Regular activity
Dietary fibre – 25+ g/day – Replace/reduce animal sources with plant foods more often
Soy – Up to 1 <u>food</u> (not supplements)/day. Speak with your oncologist/doctor if ok for you

Reducing Breast Cancer Risk

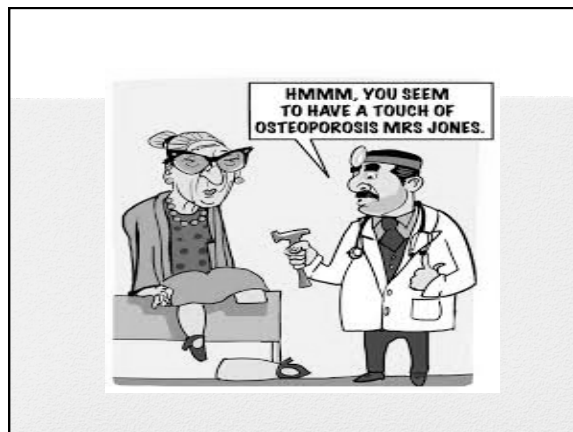


- ❖ **Benefits of Phytoestrogens (isoflavones** - estrogen-like effects plus antiestrogen properties)
 - Blocks natural estrogens from binding to estrogen receptor - reduces risk
 - Antioxidant & anti-inflammatory properties
- ❖ **Soy (Isoflavones)** –Was concern in breast cancer survivors, especially ER+. Now several studies consistently show benefits with moderate soy amounts. Improved outcomes with **whole soy food NOT supplement** consumption.
 - “Moderate” = 1-2 servings/d
 - 20-60mg isoflavones daily & regular intervals needed – food sources safe
 - 50 times less potent than regular estrogen
- ❖ **A diet rich in phytoestrogens....also full of:**
 - > Phytochemicals(antioxidants), vitamins, minerals, fibre, omega 3
 - > Include - soy/legumes, whole grains, flaxseed, nuts/seeds, veg, fruits


Isoflavone Content in Soyfoods



Soy Foods	Serving Size	Isoflavone content (mg)
Roasted soy nuts	¼ cup	40-60
Soybeans (in shell)	¼ cup	14
Soy flour	¼ cup	28
Soy beverage (most brands)	1 cup	20-25
Soy beverage (So Nice)	1 cup	60
Soy hot dog	1	15
Soy pro isolate (waterextract'n)	2 rounded Tbsp (30g)	30
Tempeh, cooked	3oz (90g)	48
Tofu, firm	3oz (90g)	22
Soy oil, lecithin, sauce		Poor sources
Isoflavones also in flaxseed,	green tea, broccoli, whole	grains




Protecting your long-term health Reducing Osteoporosis Risk



- **Osteoporosis** – low bone density(mass) & deterioration of existing bone tissue
- **Hormones** – Estrogen & calcitonin decrease as we age
Thyroid hormone also influential. All important for bone health
- **Early 20's** – bones have reached peak bone mass – stop increasing in density
- After reach bone mass peak – natural bone loss occurs slowly thereafter
- **Before menopause**, women lose bone @ 1%/yr (same as men)
- **Within 1st 5yrs** after menopause, **women lose bone 2-6x faster**
Some have more rapid loss than others
- By 10yrs after, rate of bone loss returns to 1%/yr

- ✓ Affects **1 in 3 women & 1 in 5 men** in their lifetime
- ✓ **Genetics** – parents early fracture/hip fracture
- ✓ **Stay active.** Weight-bearing activity stimulates bone to increase in strength & density during peri & post-menopausal years
- ✓ **Weight training** also has protective effect on bone density
- ✓ **Calcium, vitamin D** (increase intestinal absorption) & **magnesium** (to make parathyroid hormone) work together to maintain strong bones
- ✓ **Calcium citrate** better absorbed than carbonate. Split doses over day (500mg max in one tab)
- ✓ **Magnesium** – “Typical” North American diet low d/t highly processed choices. Choose wh grains, legumes/soy, nuts/seeds, dairy, dark gr veg
- ✓ **Smoking** - Negative affect on bone health
Smokers have early natural menopause & increased risk of fractures



Calcium & Vitamin D Recommendations


(referenced from Dietitians of Canada & Osteoporosis Canada)

AGE	Calcium	Vitamin D
Adults 19-50 yrs 51-70 yrs	1000 mg Men 1000 mg Women 1200 mg (Max 1500mg in supp)	600-1000 IU (Max 2000IU/d)
Adults > 70 yrs	1200 mg	800-1000 IU

High Calcium Containing Foods


Calcium Source	Serving	Calcium Content (mg)
Milk	1 cup	300
Calcium fortified soy, almond milk	1 cup	300
Yogurt	¼ cup	300
Cheese, hard	1.5 oz	300
Tofu, firm(w ca sulphate)	4oz (120g)	260
Blackstrap molasses	2Tbsp	290
Collard greens, cooked	1 cup	350
Kale, cooked	1 cup	175
Spinach/Swiss Chard, cooked	1 cup	150
Broccoli, cooked	1 cup	95
Soybeans, cooked	1 cup	175
Black beans, cooked	1 cup	100
Salmon with bones	½ tin (45g)	200-300
Nuts	¼ cup	70-100

Osteoporosis Risk Dietary Considerations



- ✓ **Adequate intake important** to maintain strong bones & strong muscles
- ✓ **Protein** – high protein intake can cause calcium to be excreted by kidneys rather than reabsorbed & deposited in bone
- ✓ **Caffeine** (coffee, tea, colas) – max 400mg/d - coffee, tea, cola – likely most detrimental if not meeting calcium needs
- ✓ **Sodium** – too much causes kidneys to excrete calcium
Keep max to 2000-2500mg/d (table salt & packaged foods)

A Multivitamin/Mineral tab tops up a healthy diet without creating excesses that can be harmful





Supplement to consider	Goal/Amount to Take	Additional Comments
Women's Adult Multivitamin/Mineral Tablet	Take with food for better absorption	Don't need "natural" or "slow-release" To provide vitamins : folic acid, A (max 2500IU), D, beta carotene, B1, B2, B6, B12 & minerals : iron, zinc, copper, magnesium, iodine, selenium
Iron	Menstruating 18mg/d After 8mg/d	Loss of iron through monthly blood loss Don't drink tea or coffee 1 hr before/hrs after eating (if low iron levels so better absorption) Include vit C source with (fruits & veg) You can find this in the correct multivitamin/min tab
Vitamin B12	2.4mcg/d	Less stomach acid as we age to absorb B12. Advised if 50+yrs. You can get this in a multivitamin tab
Calcium Citrate	300mg for every serving not consumed/day	Split doses over day (500mg max in one tab) Swallowed or chewable. W or w/out food
Vitamin D3	600-1000 IU/day year-round or at least all winter	Max 2000 IU/day Separate supp needed to provide 600-1000IU
Plant sterols	2g/day	Margarine, yogurt & milk alternatives with added plant sterols
Probiotics from food 1 st choice but supp an option	>1 (to 30) billion CFU's/d	Eat yogurts, kefir, fermented foods

Credible Menopause & Nutrition Websites

(some statistics & information used from many of these sites)

- menopause.org – North American Menopause Society
- healthywomen.org – National Women's Health Resource Centre
- osteoporosis.ca – Osteoporosis Canada
- oncologynutrition.org – Academy of Nutrition & Dietetics
- cancer.ca – Canadian Cancer Society cancer.org – American Cancer Society
- todaysdietitian.com – Resource for Dietitians – public access
- nih.gov – National Institute of Health
- lesliebeck.com – Canada's Leading Professional Dietitian & Author (some tables & information for this presentation were taken from her book...an excellent read!)
- myfitnesspal.com – Food & activity log
- supertracker.usda.gov – "My Weight Manager" – Personalized nutrition and physical activity plan/log
- eatracker.ca eatingwell.com cleaneating.com eatrightontario.ca

Questions?

**“We are what we repeatedly do.
Excellence, therefore, is not an act,
but a habit.”**

Aristotle

