



Eat Well 2 Feel Well with Parkinson's

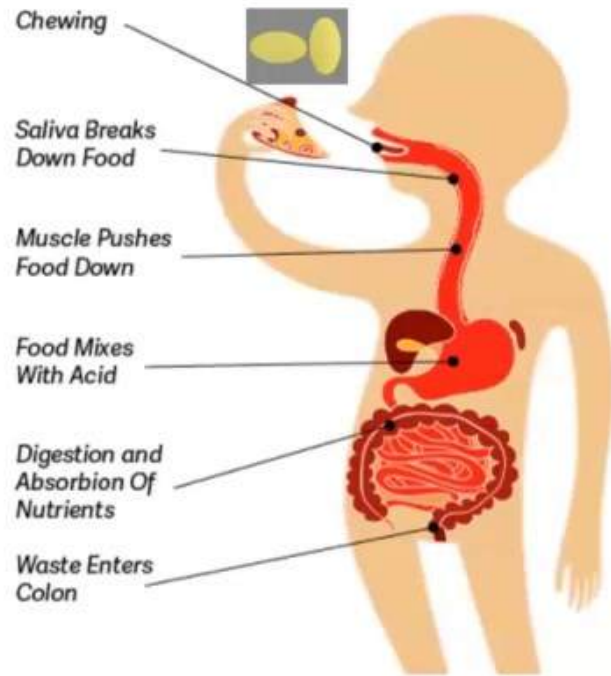
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Founder, My Moves Matter, A Digital Self Care Companion for People with Parkinson's

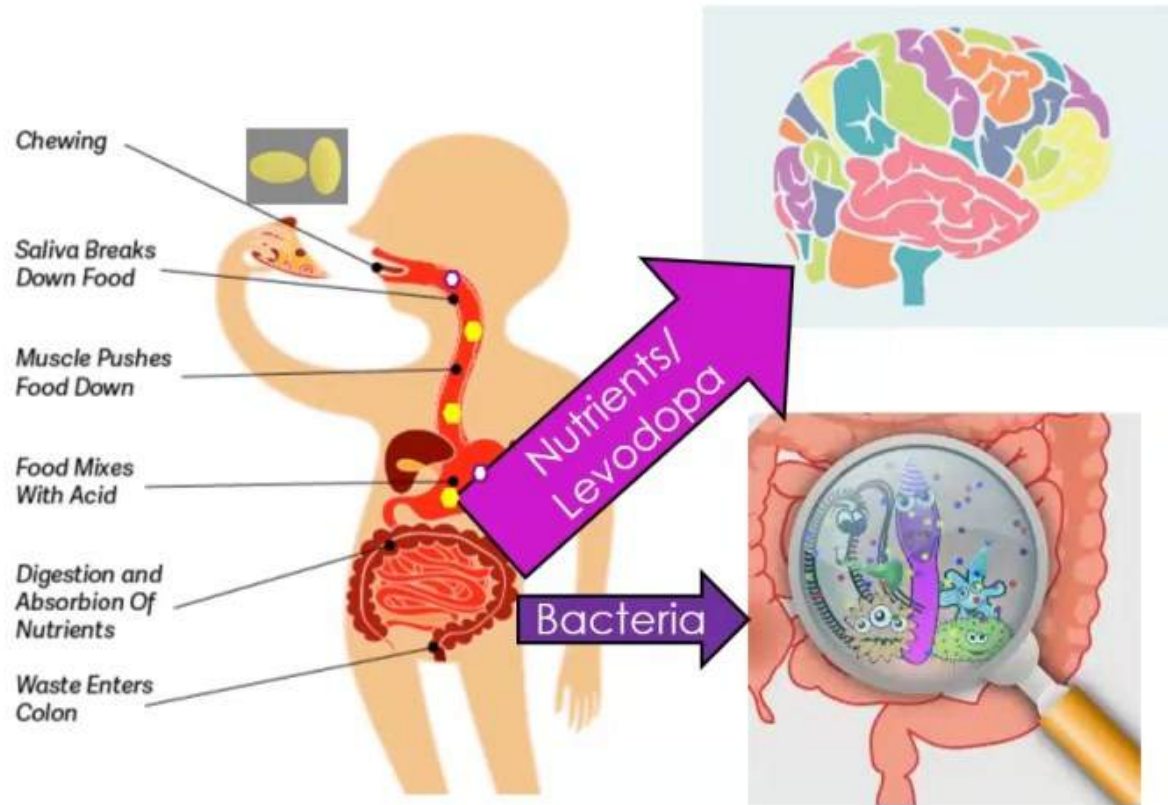


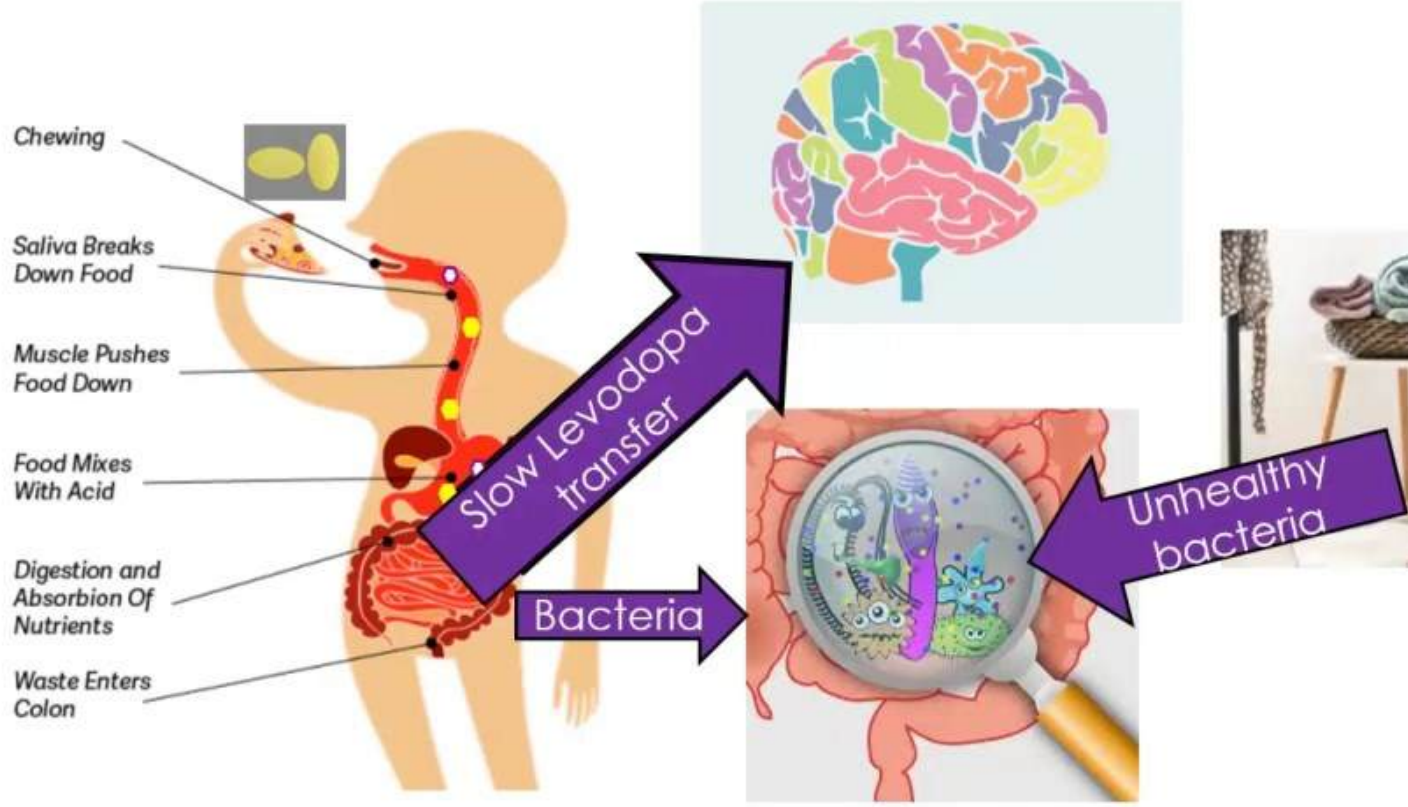


Keep Regular Bowel Movements

























Choosing the right fibre

25-30G FIBRE / DAY

SOLUBLE & INSOLUBLE

Soluble Fibre

 1 medium apple	 7 strawberries	 1 dessert bowl of salad	 3 tablespoons of sweetcorn
 ½ of a grapefruit	 2 broccoli spears	 3 tablespoons of carrots	 1 medium orange
 1 medium banana	 4 heaped tablespoons of cooked spinach	 3 tablespoons of peas	 1 medium pear
 ½ an avocado	 2 kiwi fruit	 2 satsumas	 7 cherry tomatoes

What is a
serving of
fruit or
vegetables?

Soluble Fibre



Insoluble Fibre



Insoluble Fibre



Insoluble Fibre

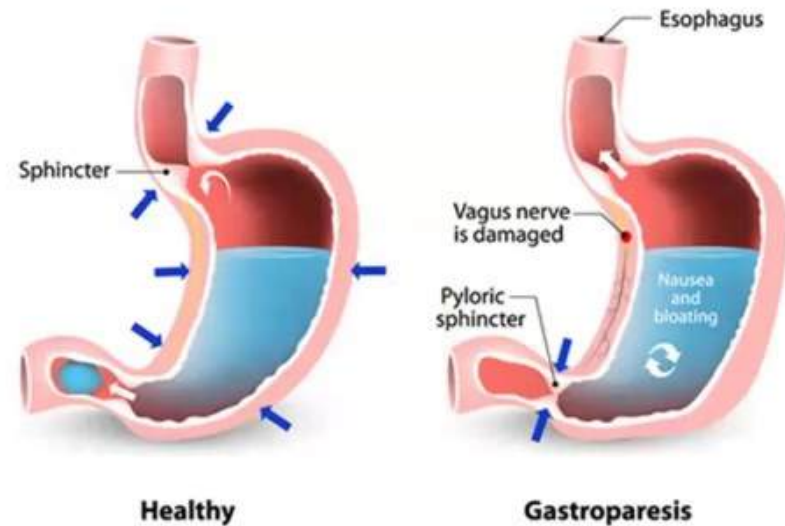
EXAMPLES OF WHOLE GRAINS. TRY A NEW ONE EVERYDAY!



Exception – Slow Stomach Emptying

- Heartburn/Reflux
- Nausea
- Vomiting
- Feeling full quickly when eating
- Abdominal pain or bloating
- Belching
- Loss of appetite/Weight loss
- Changes in blood sugar

GASTROPARESIS



Exception – Slow Stomach Emptying

- Get properly assessed for Gastroparesis
- See a Dietitian
 - Avoid high-fibre vegetables and fruits
 - Eat smaller meals (5 or 6 smaller meals throughout the day)
 - Chew food completely
 - Choose cooked vegetables and fruits over raw, uncooked fruits and vegetables
 - Avoid fatty foods (these can slow digestion)
 - Puree your food or eat soups if liquids are easiest to swallow
 - Drink plenty of water each day (8 to 10 glasses)
 - Take a walk after you eat
 - Avoid alcohol, smoking, and carbonated beverages
 - Try not to lay down within 2 hours of eating





Keep Hydrated





Drink Enough Fluid



Watch Your Caffeine Intake



- ❑ Mild central nervous system stimulant - temporarily delays fatigue
- ❑ Max intake = 300mg/d (3 cups instant coffee)
- ❑ May increase alertness + enhance performance
- ❑ Stimulates the bowel
- ❑ Increase absorption & speed of uptake of levodopa



- Restlessness
- Insomnia
- Tremors
- Rapid breathing
- Release of cortisol (stress hormone) and adrenaline ('fight or flight' syndrome)
- Increased Blood Pressure & heart beat

➤ Restlessness

Remains in blood stream
for up to 8 hours

Avoid for at least 4 hours
before bedtime

ing

cortisol (stress
and adrenaline
' syndrome)

ood Pressure



Watch Your Alcohol Intake

1 Standard Drink contains 10g of pure alcohol



...and some drinks are more than one Standard Drink 10g of pure alcohol



- ☐ Makes you pee
- ☐ Dehydrates
- ☐ Depletes vitamin & mineral stores
- ☐ Affects food choices
- ☐ Interacts with medications

Exercise Your Bowel



Use of Probiotics

If increasing fibre, fluid & taking regular exercise have not helped constipation then consider probiotic:

- ❑ E.g. Symprove
- ❑ Trial for 3 months
- ❑ Track your bowel movements, any other symptoms
- ❑ Let your neurologist, PD Nurse know you are trialling it.

Use of Laxatives

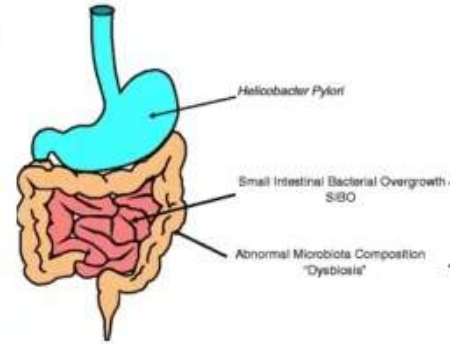
If increasing fibre, fluid & taking regular exercise have not helped constipation then consider [laxative treatment](#):

- ☐ Bulk-forming laxatives
- ☐ Osmotic laxatives
- ☐ Stimulant laxatives
- ☐ Stool-softener laxatives

Speak with your neurologist, PD Nurse or GP about laxatives.

Microbiome affects medication & vitamin & mineral deficiency

	Interferes with levodopa absorption	Vitamin B 12 Deficiency	Iron Deficiency	Vitamin D Deficiency
H Pylori	✓	↑ Risk	↑ Risk	↑ Risk
Small Intestinal Bacterial Overgrowth (SIBO)	✓	✓		Possible risk



- ❑ Eating a healthier diet associated with reduced risk of H pylori
- ❑ Eating a diet rich in plant-based foods is associated with healthier gut bacteria in people with PD.

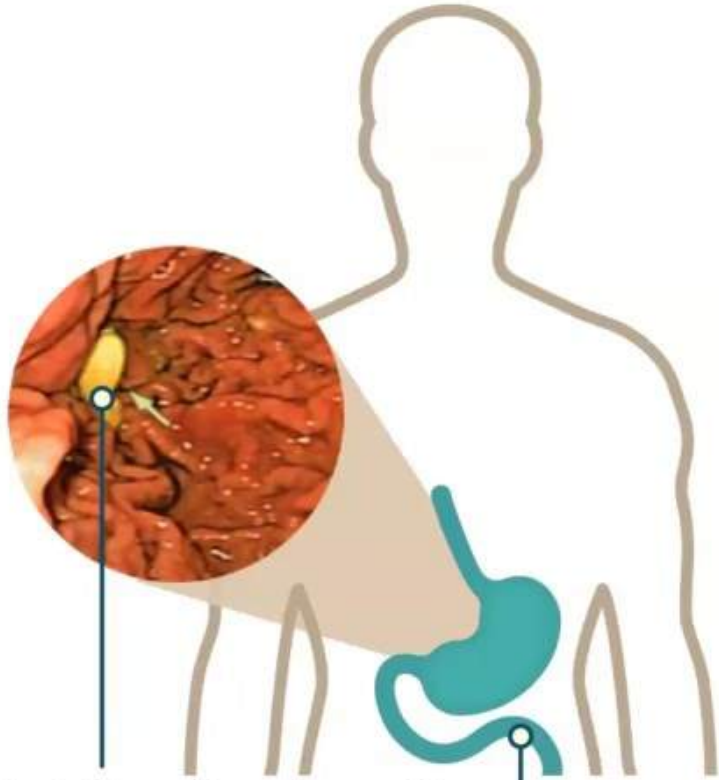


Be Mindful of Certain Foods & Medication



Meal composition

If you eat a large meal high in fat & protein it may slow down digestion in your stomach



Carbidopa/levodopa pill trapped in the stomach 1½ hours after being swallowed

Levodopa needs to pass through the stomach and into the intestine to be absorbed

Protein Foods & Symptom Fluctuations

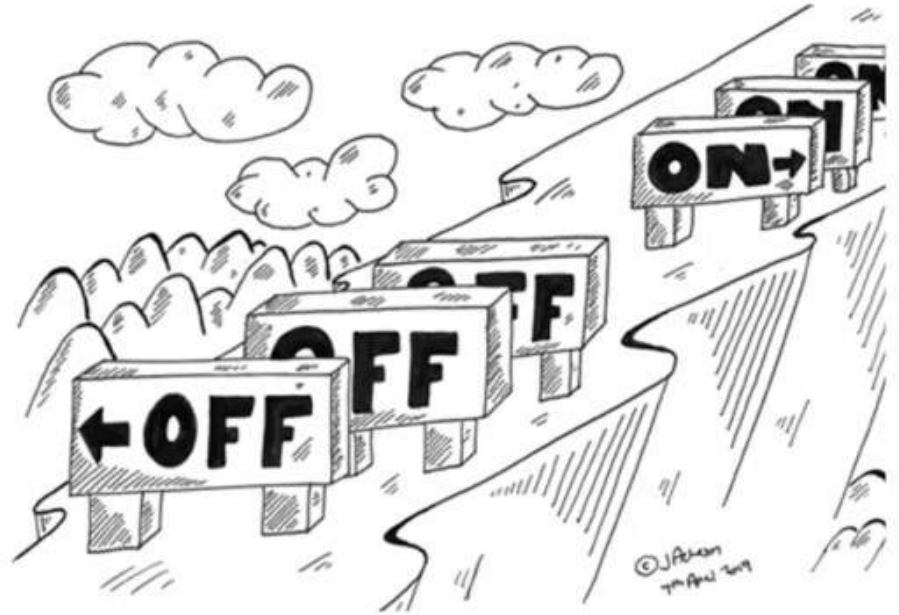
Levodopa + Carbidopa meal spacing for best results



- ☐ Protein can interfere with Levodopa absorption in the gut/brain
- ☐ Take Levodopa 30-60 mins before meals OR 60-120 mins after meals
- ☐ Avoid large protein heavy meals
- ☐ Avoid taking levodopa with milk

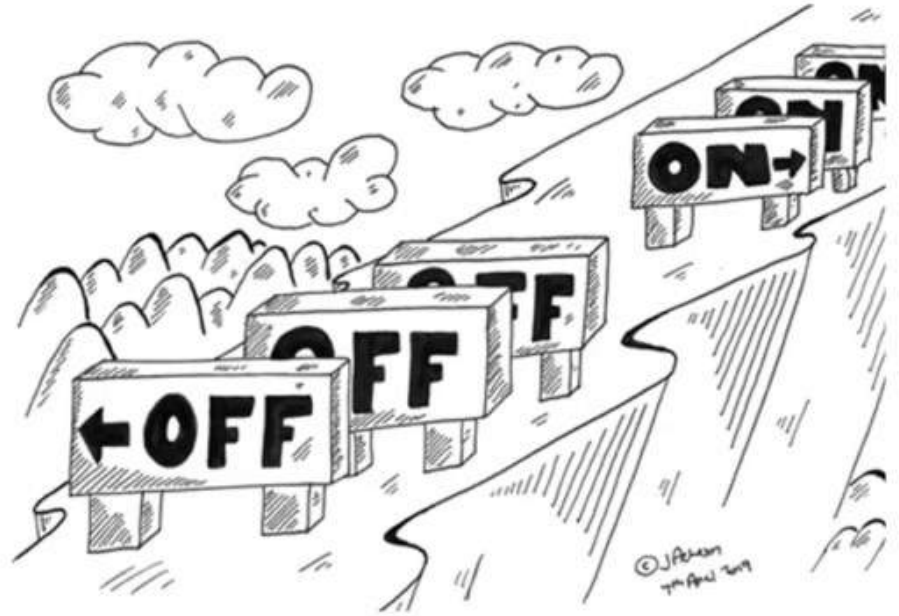
Protein Foods & Symptom Fluctuations

- ❑ Keeping to max 0.8g/1g protein/kg body weight per day
- ❑ Spread protein requirements across 3 meals
- ❑ Eat more protein at time(s) of day when one is less affected by 'off' periods
- ❑ Protein Redistribution Diet



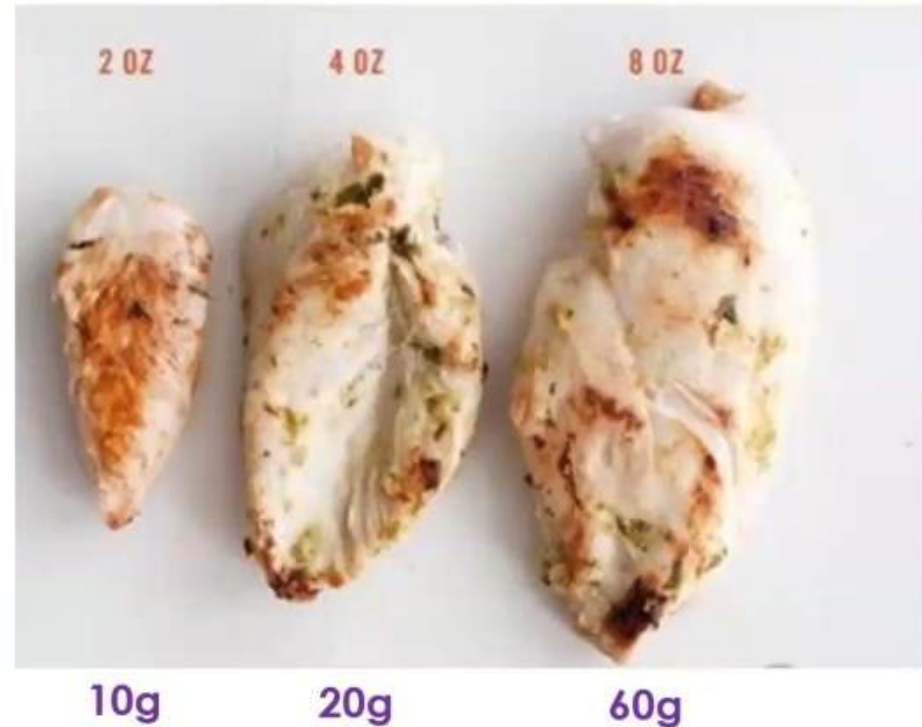
Protein Redistribution Diet

- ❑ Keeping to max 0.8g/1g protein/kg body weight per day.
- ❑ Protein redistribution diet – day-time protein <10g & rest of protein requirement in evening time.
- ❑ Protein at evening/supper time only may lead to reduction in mobility during the night-time.
- ❑ Consult a dietitian to ensure you do not lose weight/muscle mass.



Protein Redistribution Diet

	55kg woman	70kg man
Total protein/day	44-55g/day	56-70g/day
Protein during day	10g	10g
Protein evening meal & across the evening	33g-44g	46-60g



Protein Quantity & Quality



Protein quantity

	Contain 10g protein	
Food		Approx amount
Breakfast	2 slices wholemeal bread 1 egg	5g
Chicken	35g	2 small slices
Fish, white	50g	½ small fillet
Salmon, grilled	45g	½ small fillet
Milk (all types)	300mls	½ pint
Eggs (whole)	100g	2 eggs
Nuts	25g	1 small packet
Baked beans	200g	5 tablespoons
Lentils, cooked	150g	3 tablespoons
Hummus	80g	2 tablespoons
Soya milk	350mls	⅔ pint

Protein quality & quantity

- ❑ Combats fatigue
- ❑ Good for immune function
- ❑ Retention of muscle mass
- ❑ Makes Dopamine





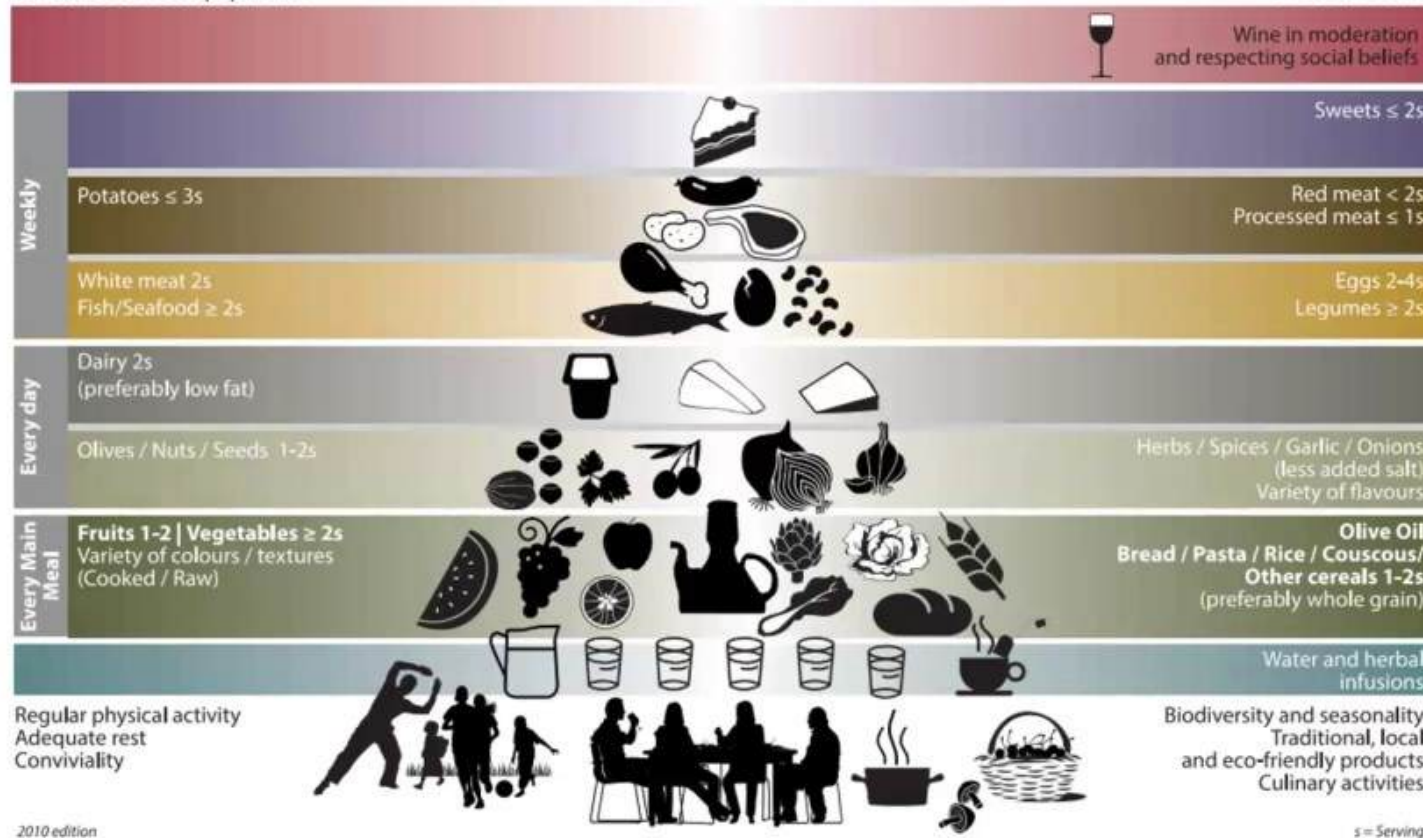
Eat Like a Mediterranean



Mediterranean Diet Pyramid: a lifestyle for today

Guidelines for Adult population

Serving size based on frugality and local habits



© 2010 Fundación Dieta Mediterránea
The use and promotion of this pyramid is recommended without any restriction.

2010 edition



Adapted from Morris MC, et al
Alzheimer's Demment, 2015
Sept 11/18:1015-1022

Mind your PD

Mediterranean-DASH Intervention for Neurodegenerative Delay diet

	Med diet	Mind diet
Wholegrains	More than 4/d	at least 3/d
Vegetables	More than 4/d	at least 1/d Green leafy over 6/week
Potatoes	More than 2/d	
Fruit	More than 3/d	Berries at least 2/week
Legumes, nuts & beans	More than 6/week	Beans more than 3/week Nuts at least 5/week
Fish	More than 6/week	At least 1/week
Poultry	3 or less /week	At least 2/week
Red meat & products from	1 or less/week	Less than 4/week
Fast fried food		Less than 1/week
Olive oil	More than 1/day	Primary fat in diet
Butter/Margarine		Less than 1 tablespoon/day
Full fat dairy	Less than 10/week	Cheese <1/week
Pastries/sweets		Less than 5/week
Alcohol	Less than 300ml/day	Less than 1/day

Color	Phytochemical	Vegetables and Fruits
Red	Lycopene	Tomatoes and tomato products, pink grapefruit, watermelon
Red/purple	Anthocyanins, polyphenols	Berries, grapes, beetroot, prunes
Orange	α -, β -carotene	Carrots, mangoes, pumpkin
Orange/yellow	β -cryptoxanthin, flavonoids	Cantaloupe, peaches, oranges, papaya, nectarines
Yellow/green	Lutein, zeaxanthin	Spinach, avocado, honeydew, collard and turnip
Green	Sulforaphanes, indoles	Cabbage, broccoli, Brussels sprouts, cauliflower
White/green	Allyl sulphides	Leeks, onion, garlic, chives

Reduce Ultra Processed Foods



Traditional
vegetables, fruit, beef,
lamb, fish,
whole-grain foods



Associated with a **lower**
risk of a diagnosis of
depression or anxiety



Western
meat pies, processed meats,
pizza, chips, hamburgers,
white bread, sugar, flavored
milk drinks, beer



Associated with a **higher**
rate of depressive
disorders

Vitamin B 12 Deficiency



NEUROPATHY SYMPTOMS



Unusual sensations



Pain from light touch



Burning



Numbness



Tingling



Balance problems



Muscle cramping



Twitching

- ❑ Low B12 status was common in early PD.
- ❑ Low B12 at baseline predicted greater worsening of mobility.
- ❑ Elevated homocysteine predicted greater cognitive decline.

Elevated homocysteine levels are associated with

- ❑ greater motor impairment in males
- ❑ poorer cognitive performance in females.

Neuropathy is very common in advanced PD treated with high doses of (>2000mg) levodopa/carbidopa irrespective of the formulation due to low Vitamin B6.

- ❑ PwP are at risk of vitamin B12 and B6 deficiencies.
- ❑ Levodopa metabolism requires adequate levels of vitamins B12 and B6.
- ❑ Isolated B12 or B6 deficiency may lead to depletion of B6 or B12, respectively.
- ❑ If both are deficient, B12 supplementation could worsen B6 deficiency and vice versa.
- ❑ Coexistent B12 and B6 deficiencies should be considered in PD patients with neuropathy.

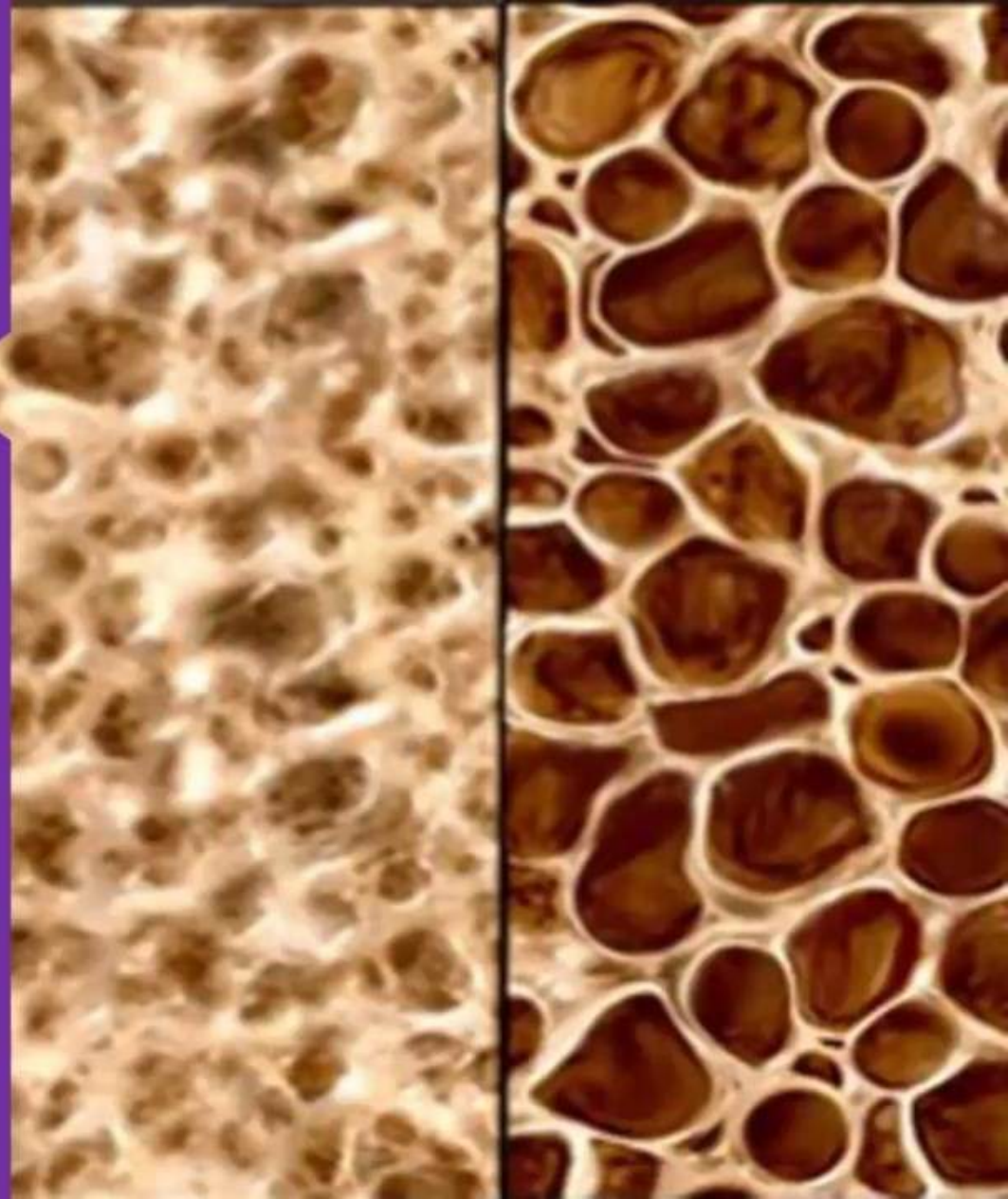
B Vitamins

Vitamin	†	†	UL	Negative affects
B6	1.7 mg	1.5mg	100mg	Pyridoxine can cause severe <u>nerve</u> damage, leading people to lose <u>control</u> of their bodily movements
B12	2.4 mcg	2.4mcg	None	Vitamin B12 has not been shown to cause any harm, even at high doses.
B9	400 mcg	400mcg	Folate 1000mcg	High Folate can hide a <u>vitamin B12</u> deficiency leading to <u>nerve</u> damage Large doses of folate supplements might also worsen the <u>symptoms</u> of vitamin B12 deficiency.
B1	None	None	None	Thiamin has not been shown to cause any harm.
B3	16 mg	14mg	Niacin 35mg	30 mg or more of nicotinic acid can make the skin on your face, arms, and chest turn red and burn, tingle, and itch. These <u>symptoms</u> can also lead to headaches, rashes, and dizziness.

Vitamin D Deficiency

Many people do not notice symptom's but possibly can include:

- ❑ Fatigue.
- ❑ Bone pain.
- ❑ Muscle weakness, muscle aches or muscle cramps.
- ❑ Mood changes, like depression.

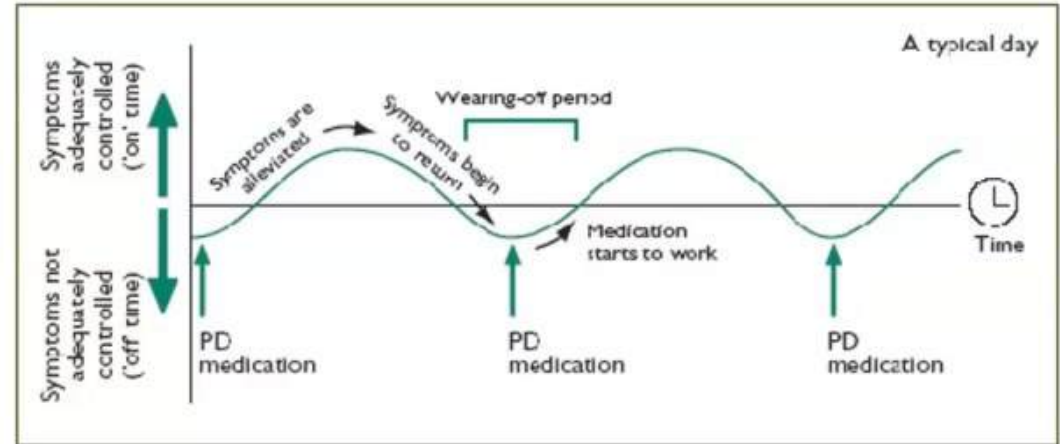




Curb Your Cravings



Balance your Blood Sugar



Reduce Your Sugar





Watch Your Weight



Watch Your Weight

- ❑ Lower weight higher risk of dyskinesias
- ❑ Women might require a 25% reduction in LD dose
- ❑ Responses to drugs maybe affected by physiological changes during the menstrual cycle

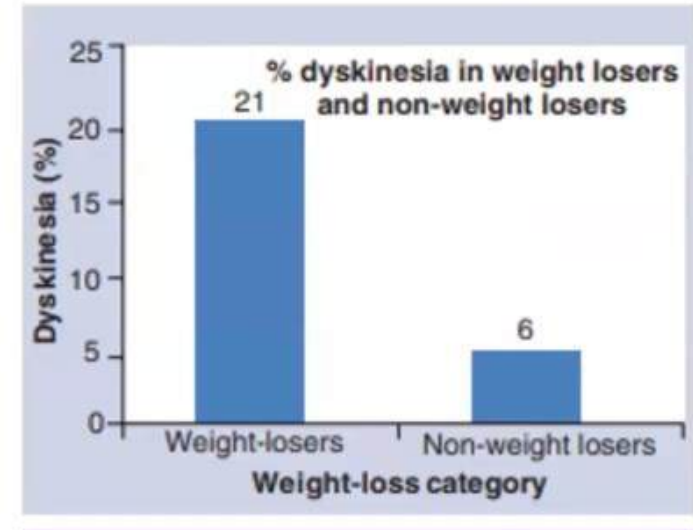


Figure 2. Frequency of dyskinesia in weight losers and non-weight losers.

Data taken from [37].



Watch Your Weight

- ❑ Dyskinesia, rigidity, tremor
- ❑ Constipation
- ❑ Slow stomach emptying
- ❑ Difficulty prepare/cook/eat food
- ❑ Lack of smell & taste



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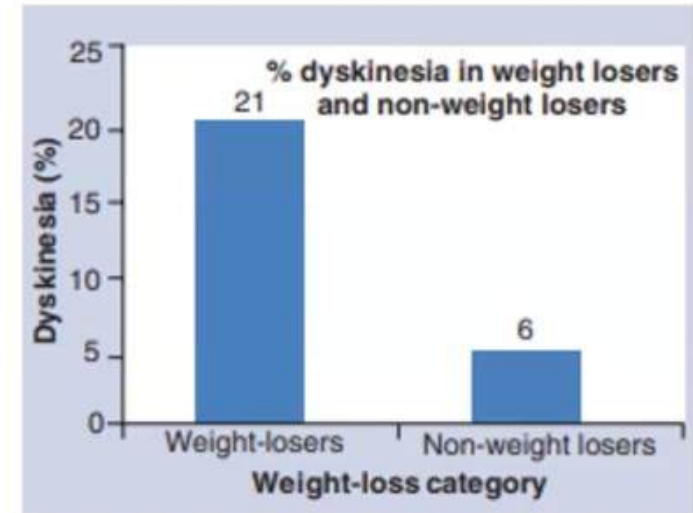


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Watch Your Weight

- ❑ Overweight & obesity due to issues such as Impulse Control Disorder.
- ❑ Eating disorder 27% vs 13% control.
- ❑ Food addiction 24% PD (50-70 y.o); higher in women (53% vs 37% control).
- ❑ Weight gain after DBS reduces EE by reducing dyskinesias or tremors.
- ❑ ~3kg at 3mths to 6kg at 12 mths.





Track Yourself



Learn From Yourself

- ☐ People who keep records are more successful in making positive changes.
- ☐ Easy way to identify problem or areas for change.
- ☐ Helps to motivate us to maintain healthy new habit

DATE						
MEALTIME Please record time of PD medication also	QUANTITIES/DESCRIPTION	PD SYMPTOMS Time & Score	BOWEL SYMPTOMS Time & Score	STRESS Time & Score Cause of stress	SLEEP Time you went to sleep & No hours asleep at night	EXERCISE Type, intensity, duration
BREAKFAST – NOTE TIME						

- ☐ Awareness of triggers of your behaviour
- ☐ Self monitoring helps to identify your triggers & how to counteract them





Ask for a Referral to See a Dietitian



How do I see a Dietitian?

**84% PwP
Were never
referred to
Dietitian**

NUTRITION SURVEY



**87% PwP
Never asked to
be referred to
Dietitian**

**People with Parkinson's (PwP) consider diet important for care
but referral to Dietetic service is lacking**

How do I see a Dietitian?

Currently 85% don't have access to a Dietitian

- ☐ Request through your neurology team
- ☐ Request through your GP
- ☐ Request through your community health centre
- ☐ Private options

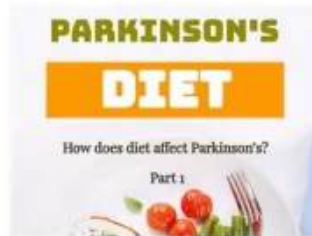


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E-Books

Below is a selection of FREE E-Books to help you navigate your life with Parkinson's



01 Parkinson's & Diet Part 1

This e-book looks at what diet is good for Parkinson's, gender differences and weight management.

Sign Up to get your FREE E-Book.



Coming Soon

Medical Nutrition Therapy

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Our Service:

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- Group programs
- Individual programs
- Family/carer programs

