



Sodium and Fluid Management in PD

Watching Na intake: Why?

Facts

- Cardiovascular disease (CVD) is a leading cause of death in ESRD pts.
- Many PD pts are in hypervolemic, but may not be clinically evident until extracellular volume overload is up to 10% body weight
- “edema-free” does not equal to normohydration

Watching Na Intake: Why?

- Pts on PD are prone to develop hypertension and volume overload, especially after the first 2-3 years of dialysis, often coincides with loss of residual renal function (RRF)
- With loss of RRF, PD becomes the only means of sodium removal

Watching Na Intake: Why?

- Na removal by CAPD is likely inadequate, but even more limited in pts on automated peritoneal dialysis (APD)
- With loss of RRF, watching Na and fluid intake becomes even more important

Watching Na Intake: Why?

high Na intake



stimulates thirst



↑ fluid intake



hypertension + volume overload

Watching Na Intake: Why?

When Na intake > Na output:

- Natural physiological response is to drink more to maintain normal serum osmolality
- Effort should be at helping pts to limit their Na intake, which will help limit thirst
- Advising on fluid restriction without advice on cutting back on Na intake is futile. Pt often feel guilty when they can't resist the urge to drink

Fluid Intake:

- General rule: Urine output + 1000 mL /day
- Look after the sodium intake, and the fluid will look after itself

Sodium IQ

True or False

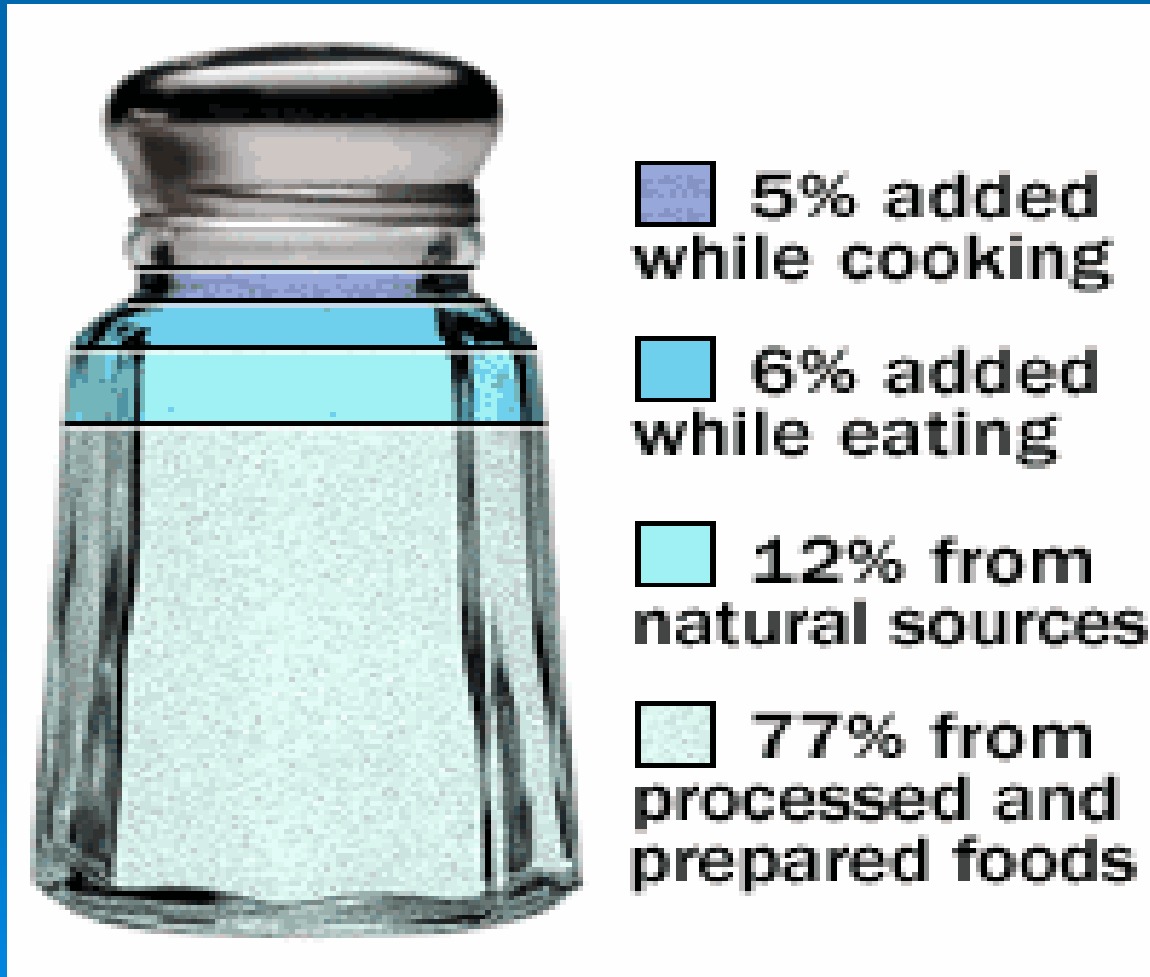
- I don't add salt to my food so I can't be eating too much salt

How Much Na do we eat?

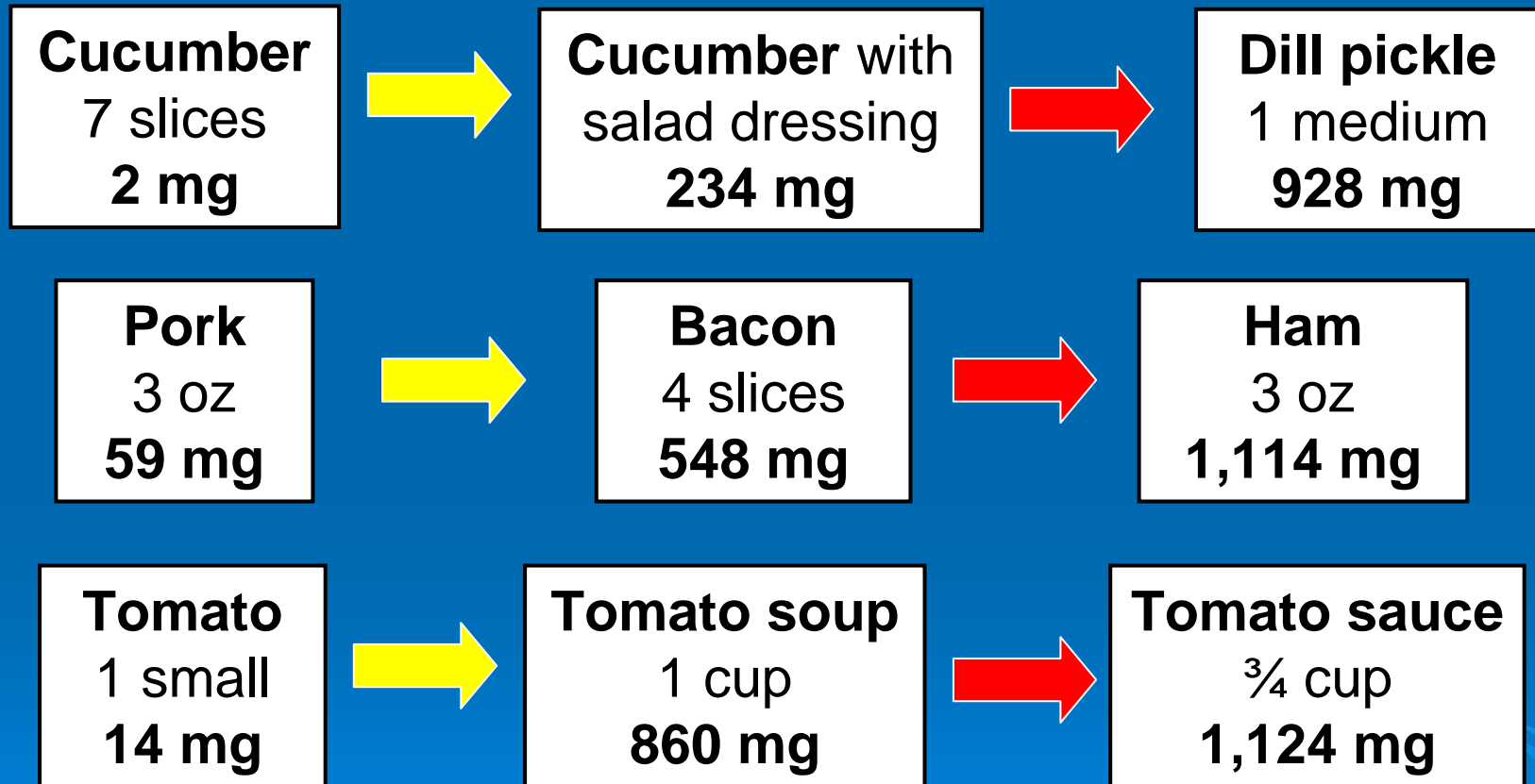


No consensus on the desirable amount of Na intake in PD, but most believe level should be ~2400 mg per day.

Where does the Na come from?



More Processed = More Na



Label Reading

- “I don’t know what I am reading, it’s all Greek to me”

When Grocery Shopping.....

- Does it take you an hour to choose a box of cereal?
- Does your partner come across you staring vacantly at the canned food section?
- Are you reading more food packages than novels?
- Do you ever give up altogether and drive to the nearest MacDonald's?



Help is here.....

Nutrition Facts Valeur nutritive

Per 1 bowl (300 g) / Pour 1 bol (300 g)

Amount Teneur	% Daily Value % valeur quotidienne
------------------	---------------------------------------

Calories / Calories 440

Fat / Lipides 19 g **29 %**

Saturated / Saturés 4 g **21 %**
+ Trans / Trans 0.2 g

Cholesterol / Cholestérol 35 mg

Sodium / Sodium 860 mg **36 %**

Carbohydrate / Glucides 53 g **18 %**

Fibre / Fibres 4 g **16 %**

Sugars / Sucres 6 g

Protein / Protéines 15 g

Vitamin A / Vitamine A 45 %

Vitamin C / Vitamine C 4 %

Calcium / Calcium 20 %

Iron / Fer 20 %

Step 1:

First look for the serving size. Remember, if you eat more than the serving size, you will also be getting more of each nutrient.

Step 2:

Next, find the nutrient (e.g. sodium). The amount of the nutrient will be listed in weight and in % Daily Value.

Help is Here.....



Nutrition Facts Valeur nutritive

Per 1 bowl (300 g) / Pour 1 bol (300 g)

Amount Teneur		% Daily Value % valeur quotidienne
Calories / Calories	440	
Fat / Lipides	19 g	29 %
Saturated / Saturés	4 g	21 %
+ Trans / Trans	0.2 g	
Cholesterol / Cholestérol	35 mg	
Sodium / Sodium	860 mg	36 %
Carbohydrate / Glucides	53 g	18 %
Fibre / Fibres	4 g	16 %
Sugars / Sucres	6 g	
Protein / Protéines	15 g	
Vitamin A / Vitamine A		45 %
Vitamin C / Vitamine C		4 %
Calcium / Calcium		20 %
Iron / Fer		20 %

Step 3:

Lastly, use the tables below to guide you.

Based on the table, this particular food is very high in sodium!

To help reduce sodium from processed foods look on the label for sodium of

Frozen Entrees: less than 25%

Soups: less than 20%

Most Foods: less than 10%

Help is Here.....



Sodium IQ

True or False

- Sea salt is healthier than table salt

False

- Sea salt and table salt have the same nutritional value. The real differences are their taste and texture.
- Grains, crystals or flakes – it still contains sodium

Sodium IQ

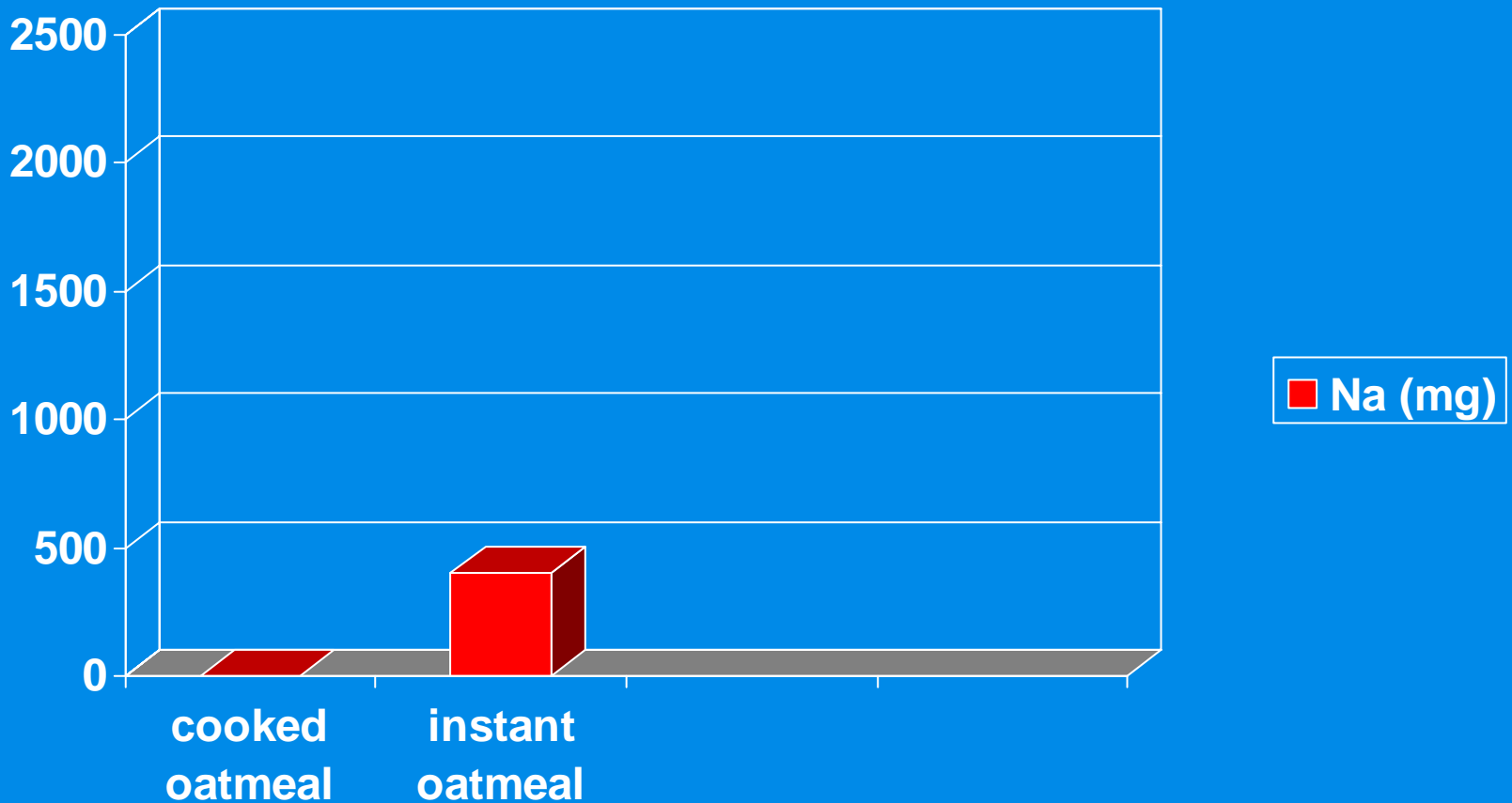
True or False

- You can tell what foods are high in salt because they taste salty

False

- Some foods that are high in sodium don't taste very salty. This is because they may have a lot of sugar in them.
 - breakfast cereals
 - baked goods
 - condiments (ketchup, relish)

High Na foods don't always taste salty



Sodium IQ

True or False

- Foods labeled “low sodium” are good choices for people on dialysis

Sodium IQ

- Check labels and ingredient lists, the sodium is often replaced with potassium

Sodium IQ

True or False

- Salt-free is the same as low sodium

False

Salt free does not mean it's free from other sodium additives

Examples:

- sodium nitrate
- sodium phosphate
- sodium benzoate

Sodium IQ

True or False

- People on low Na diets can not dine out.

False

- Pts on low Na diet can still enjoy eating out occasionally. We need to educate our pts on choosing better choices on menus.
 - choose restaurants where food is made to order, rather than fast food or buffet style restaurants
 - ask how foods are prepared
 - ask for no salt or MSG added to the cooking
 - ask to have sauce or dressing on the side
 - choose broiled/grilled dishes rather than mixed dishes

Sodium IQ

- Which has more sodium?
- A) Big Mac sandwich
 - B) 3 oz cooked ham
 - C) Spaghetti with ready to use tomato sauce

Sodium IQ

- C) Spaghetti with commercially prepared tomato sauce
(1 cup = 1400mg Na)

Big Mac sandwich = ~1000 mg

3 oz cooked ham = 1000 mg

Sodium IQ

- How long does it take to get use to a low Na diet?
 - A) 2 weeks
 - B) 4 weeks
 - C) 8 weeks or more

Sodium IQ

Taste for salt is acquired, so it's reversible

- c) It may take 8 – 12 weeks to get use to a low Na diet
 - Lower Na diet should be introduced early to allow time for taste adjustment
 - Most pts don't miss the "salty" taste if they cut back gradually

Wrap Up

1. Reducing Na intake will help control fluid
 2. Back to basics: choose fresh over processed
 3. High Na foods don't always taste salty
 4. Learn to read nutrition labels
 5. Adjusting to lower Na takes time, don't give up
- 