

Assessing Dietary Compliance in Renal Patients

Chow Pek Yee

Principal Dietitian

Head of Nutrition & Dietetics Department

18th Asian Colloquium in Nephrology

20th Jul 2019

Outline

- Overview of Renal diet
- Method used to measure dietary adherence
- Factors affecting dietary adherence
- Strategies



Overview of Renal Diet



Fishball Noodles

Wanton Noodles

Mince Pork Noodles

Prawn mee

High Fat



& High Salt



Economic Fried Bee Hoon



Mee Goreng



Fried Kway Teow



Overview of Renal Diet



SALT



DARK SOY SAUCE



LIGHT SOY SAUCE



OYSTER SAUCE

Seasonings



MSG



STOCK CUBES



KETCHUP



CHILLI SAUCE



Overview of Renal Diet

More fiber
Low fat
Low salt

Portion control
Control carbohydrate

Diabetes

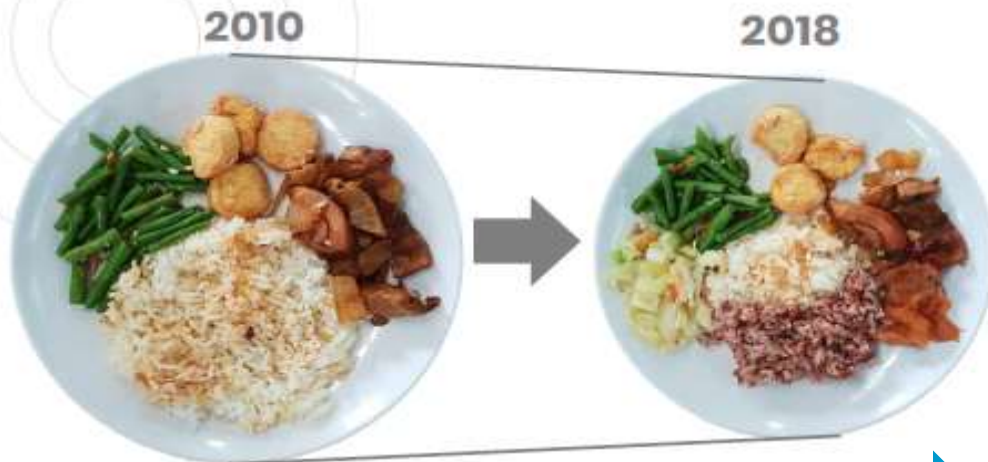
Weight control





Adhering to healthy diet...

Singaporeans' diet has improved; focus on diet quality and intake must continue



5g salt/day = 2000mg sodium
9g/day

Standardised values; data was weighted to the population distribution in 2016 based on age, gender and ethnicity.

Singaporeans are eating less

- Daily energy intake fell from 2600kcal to 2470kcal

Diet quality has improved

Per 1000 kcal:

- 3-fold increase in wholegrain
- 4% increase in fruit & veg
- Healthier fat is displacing unhealthy fat

The palettes of Singaporeans have also shifted towards richer and sweeter foods

Per 1000 kcal:

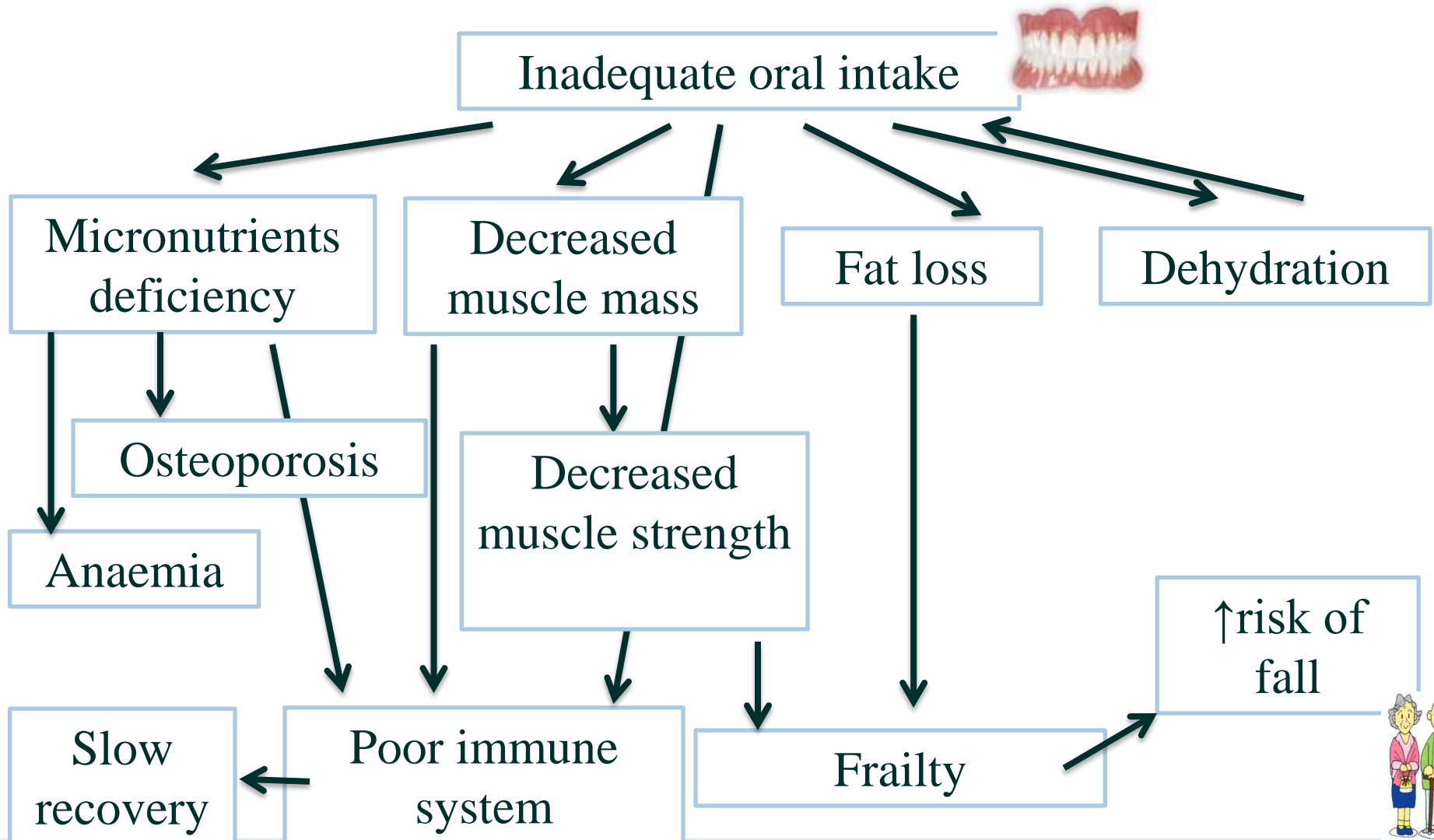
- 11% increase in total fat
- 9% increase in sugar

Singaporeans are also consuming too much salt

- 90% of Singaporeans exceed the recommended salt allowance



Nutritional Issues in Elderly



Overview of Renal Diet

	No Dialysis	Hemodialysis	Peritoneal dialysis
Sodium	Limit	Limit	Limit
Potassium	Limit	Limit	Normal
Phosphate	Limit	Limit	Limit
Protein	Limit	High	High



Soft Diet



Minced Diet



Without comments, these slides are incomplete

Pureed Diet



Nutrition Markers of Malnutrition

- Body Mass Index ≤ 18.5 kg/m²
- Unintentional loss of weight of $\geq 10\%$ in the previous 6 months
- Serum Albumin & nPCR (on dialysis)
- Subjective Global Assessment (SGA scores) of
 - based on features of the history:
 - Weight changes,
 - Gastrointestinal symptoms,
 - Dietary intake and
 - physical (muscle mass and fat mass store) examination
 - 1 – 2 severe loss of protein stores
 - 3 – 5 mild to moderate loss of protein stores



Methods used to measure dietary adherence

- Subjective approaches
 - Dialysis Diet and Fluid non adherence Questionnaire (DDFQ)
 - Food records (food diary, 3-day food record, Food Frequency Questionnaire (FFQ))
 - Stress scales relating to diet
 - Self reported adherence
- Indirect approaches
 - IDWG
 - Blood result – renal and bone mineral profile
- Combined methods



Factor associate with dietary adherence

WHO Multidimensional Adherence Model

- Socioeconomic factors
 - Age, gender, education level
- Condition and therapy related factors
 - Vintage of dialysis, dietary knowledge, practical skills and knowledge
- Health care team and system factors
 - Renal dietitian staffing ration, intense dietary intervention and support
- Patient related factors
 - Self-efficacy, family support, positive belief of diet, taste preference, depression,

CKD/ESRD Diet is Complex



Strategies

- Careful planning
 - Nutrition Education for both providers and patients
 - Preventive strategies – diet and lifestyle
 - Resources available
- Periodic assessment of nutrition status
- Monitor of compliance



Every Visit

	Ask About	Look out for ...	
1.	Weight changes	Decreasing trend	Nutrient Dense
2.	Usual number of meals per day	Decrease in number of meals	
3.	Portion size	Decrease in portion size or unable to finish meals	
4	Chewing ability	Chewing difficulties	Textured modified
5	Varieties of food choices	Look out for decrease in varieties	Oxidative Stress
6	Assessable of food eg eating out or grocery	Change in frequency, decrease in meal intakes	Micronutrient
7	Social aspect of eating	Social Isolate, depressed	





**Khoo Teck Puat
Hospital**

National Healthcare Group