Nutrition Intake of Children at the Caribou Child Care Centre

FNH 370 Group 14: Nutrition For Kids
Methods: Dietary and Ecological

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Caribou Child Care Centre

Children: around 17 preschoolers (3-5yrs) and 13 toddlers (1-3yrs)
Number of staff: 7 (full-time/part-time)
Long hour daycare with 2 snacks provided each day (9:30AM and 3:30PM)
Children and staff involved in snack Preparation
Children bring their own lunch
Portion size determined by each child

Assumptions

- Children have met their nutritional intake while outside of care centre (breakfast, lunch and dinner)
- Children are spending the whole day at the care centre
- Increased food intake with age

Nutrition Care Process

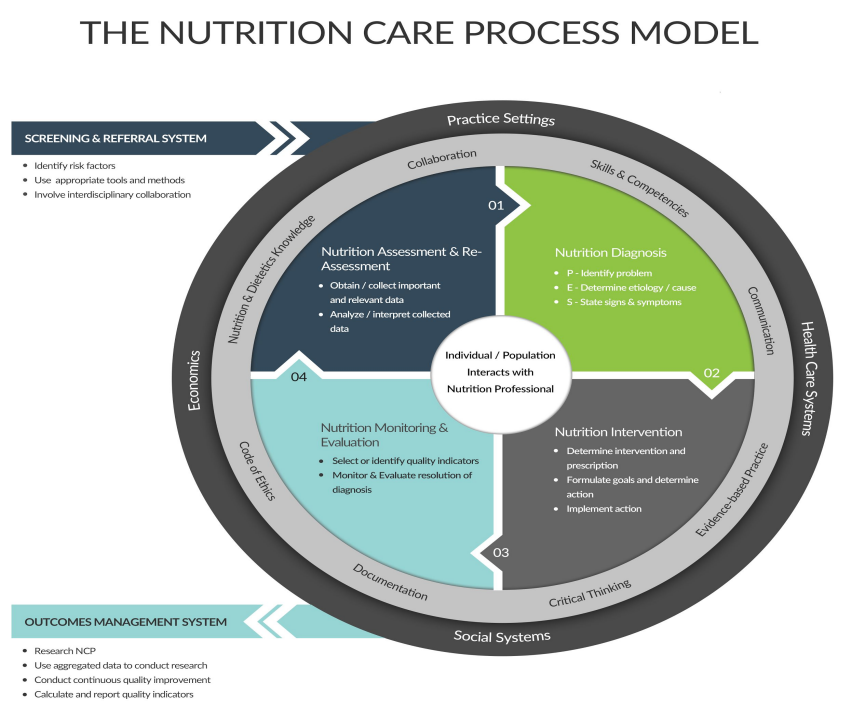
Assessment - Dietary/Ecological, questionnaire

Diagnosis - Unevenly distributed macronutrient intake

Intervention - Provide dietary guidelines for meals

Monitoring - Three day food record and observation

Evaluation - Eventual in depth FFQ



Assessment - Ecological

Response rate: 4/7

- Education: varying levels of education
- Convenience: 1 person buys food; 15 minutes preparing food
- Budget: no budget; wider option for meal planning
- Children: generally open to trying new foods

Assessment - Dietary

Types of snacks provided*:

CHO	FAT	PRO
Pasta Rice Pizza Cheerios/cereal Banana bread Apple crumble Toast Oatmeal Crackers Fruits (daily) Vegetables	Pasta Pizza	Cheese Milk Yogurt Pasta Pizza

*represent usual snack options

Data Obtained Through:

- Nutrition Questionnaire
- Direct Observation

AMDR Values

	1-3 yr olds	4-5 yrs olds
CHO	45-65%	45-65%
FAT	30-40%	25-35%
PRO	5-20%	10-30%

DRI, dietary reference intakes: The essential guide to nutrient requirements. Washington, D.C: National Academies Press.

- At least ⅓ of calories from fat
- About ⅕ of calories from protein

Why use AMDR?

- Focus on balance between different macronutrients

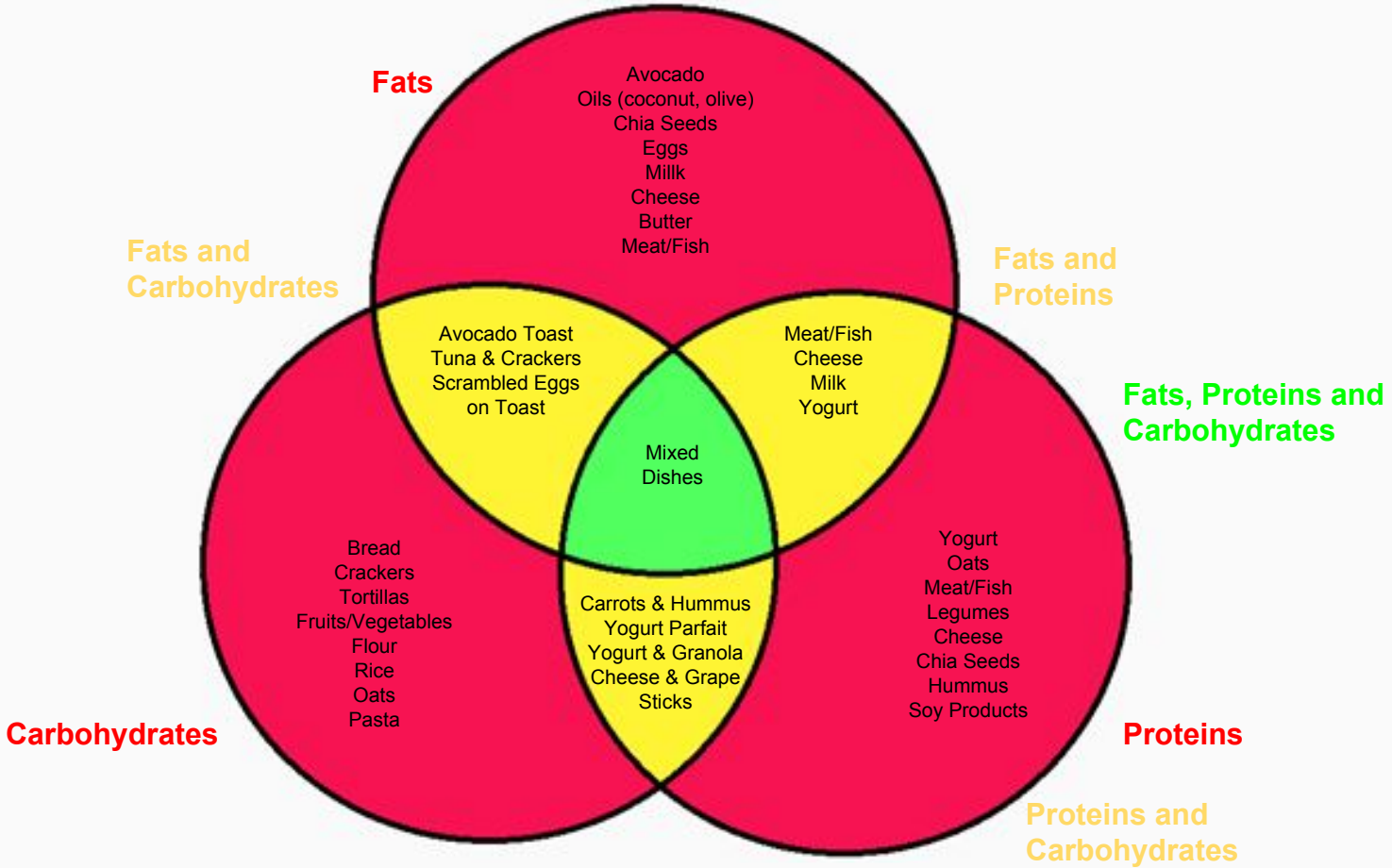
Diagnosis

PES Statement: Risk of unevenly distributed macronutrient intake related to common snacks served focusing on high carbohydrate and low protein/fat as evidenced by the results of the nutrition questionnaire.

Intervention

Encourage the implementation of a weekly meal plan.

Planning ahead ensures that food with a higher fat and protein content are available for the staff to use when preparing snacks for the children.



Dietary Guide

Macronutrient Breakdown

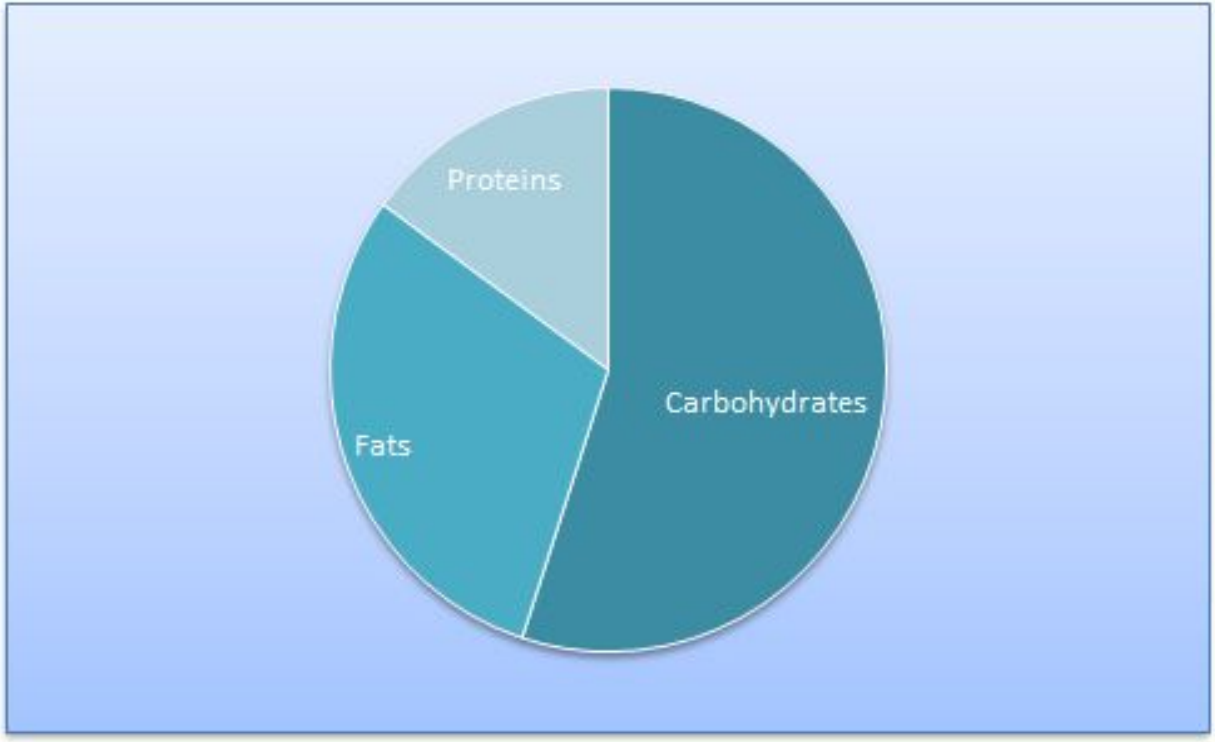
Try making mixed dishes/snacks that include CHO, FAT and PRO.

Fried Rice - rice, eggs and peas

Pasta Salad - pasta, cheese, and beans

Banana Bread - flour, banana, coconut oil and chia seeds

Smoothies - berries, milk, yogurt



Monitoring & Evaluation

1-6 Months

- Three day food record every month

6+ Months

- FFQ (with 50 items or less); administered every 4 months validated with 3 day food record/ 24-hour recall (Bell et al., 2013)

Limitations

- No information obtained on brands/ingredients/quantitative information on the common snacks served
- Inter-individual variability of intake
- Not enough time for staff to complete questionnaire
- No information provided on nutrient intake of meals (breakfast, lunch, dinner)

Summary

In summary, our case study...

Critical Questions

1) What would change with our assessment if we were able to determine what type of food the children were eating outside of the day care centre?

2) How do you determine portion sizes and how do you reflect recommendations without knowing the exact food proportions?

Citations

- FAO Corporate Document Repository. (1973). *Energy and protein requirements: Report of a joint FAO-WHO ad hoc expert committee*. Rome;Lanham;: Food & Agriculture Organization of the United Nations.
- Otten, J. J., Hellwig, J. P., & Meyers, L. D. (2006). *DRI, dietary reference intakes: The essential guide to nutrient requirements*. Washington, D.C: National Academies Press.
- Bell, L. K., Golley, R. K., & Magarey, A. M. (2013). Short tools to assess young children's dietary intake: a systematic review focusing on application to dietary index research. *Journal of Obesity*. Retrieved from http://go.galegroup.com.ezproxy.library.ubc.ca/ps/i.do?p=HRCA&sw=w&u=ubcolumbia&v=2.1&it=r&id=GALE%7CA368282597&sid=summon&asid=5a60f10989d078e7280ab5c187098bd9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