

# AVOID OBESITY IN PWS

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DIETETIAN

Good habits, once established, will be of great benefit in the long term!!!

- ▶ **difficult task** of finding a balance between limiting the food intake, in a society where we are bombarded with food, snacks and drinks.
- ▶ at the same time, **ensuring that the diet is nutritious**, with enough energy, vitamins and minerals for healthy growth.
- ▶ we need **strong strategies** to cope with the longing for food, their asking for more food and their food seeking behavior
- ▶ without **strictly managing the diet**, they may become overweight, and this may be the start of a vicious cycle of wanting more food and less activity.
- ▶ **practical strategies** to help prevent a child with PWS from becoming overweight/OBESE

# Restrictive by necessity!!!

- ▶ a highly restrictive diet is necessary for them to maintain a healthy weight and good overall health.
- ▶ it is best to remove all temptation of obtaining additional food
- ▶ children will need to be trained from an early age about the importance of healthy eating and exercise behaviours.
- ▶
  1. Remove temptation – access to food should be controlled all the time
  2. Behavior – good eating routine
  3. Quantity & Quality – lower quantity of kcal & provide foods low in fat but high in nutrients
  4. Respect the diet – not easy is very restrictive
  5. Daily exercise

# True & Fals

- ▶ Many believe that children have a lower basal metabolic rate- This belief is unfounded
- ▶ True that children with PWS have more fat mass and less lean body mass (or muscle, bone and organ tissue) Muscle burns a significant amount of energy at rest. This means that children with low muscle mass will burn less energy throughout the day than others with high muscle mass.
- ▶ Obesity may begin, even before your child exhibits a substantial increase in food intake or interest.
- ▶ Children with PWS are at higher risk of obesity!!!
- ▶ Obesity is one of the major causes of disease and death in people with PWS

# Key rules

- ▶ **1.** Concentrate on a variety of foods from the core food groups only including:
  - breads and cereals;
  - vegetables and fruits;
  - dairy including milk, yoghurt and cheese;
  - lean meat including fish, chicken and alternatives such as soy products/nut meats.
- ▶ **2.** Offer a wide variety of healthy foods, particularly vegetables, salads and fruit as this will help enormously with options for variety and with weight control in the years ahead.
- ▶ **3.** Be persistent and offer vegetables repeatedly until they become more familiar.
- ▶ **4.** We have to give them good role models
- ▶ **5.** Introduce low fat dairy food from approximately 2 years of age
- ▶ **6.** Enjoy drinking water,
- ▶ **7.** Encourage exercise and energy expending activities with your child.

# The diet plan

- ▶ low in fat,
- ▶ low in energy/kcal,
- ▶ tailored to the child's needs to enable growth in height,
- ▶ healthy – to ensure nutrient requirements are met,
- ▶ sustainable in the long term,
- ▶ manageable for the whole family
- ▶ reviewed regularly as the child grows.

# Macronutrients

- ▶ Carbohydrate is high in energy but less efficient at being converted to body fat.
- ▶ Protein is the most satisfying food for people without PWS, but remember that individuals with PWS do not feel satisfied, no matter what type of food is eaten.
- ▶ Fat has the highest calorie count per gram. Fat is also very efficient at being converted to body fat. Low fat recipes can be useful.

# Minimaise fat!!!

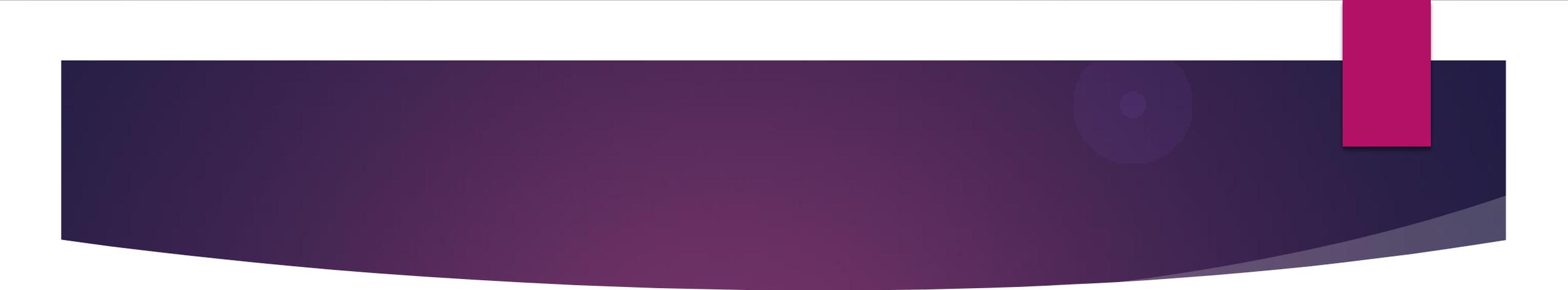
- ▶ Some low fat cooking tips include:
  - choose lean cuts of meat and remove all visible fat;
  - remove skin from chicken;
  - choose low fat cooking methods such as grilling, baking, steaming
  - roast meat on a rack to allow fat to drain away;
  - allow soups and stews to cool and skim off surface fat;
  - avoid creamy sauces and high fat gravies;
  - use low fat dairy products instead of full fat varieties;
  - use low calorie salad dressings or balsamic or wine vinegars as dressings;

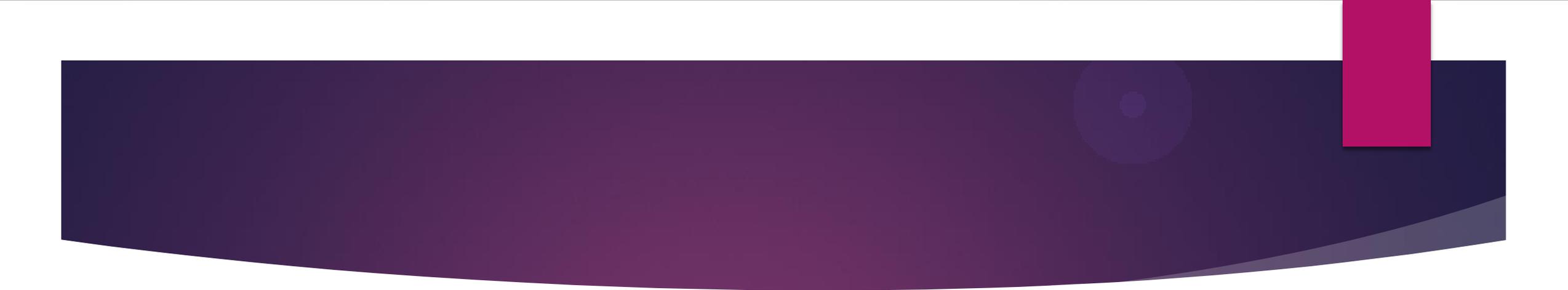
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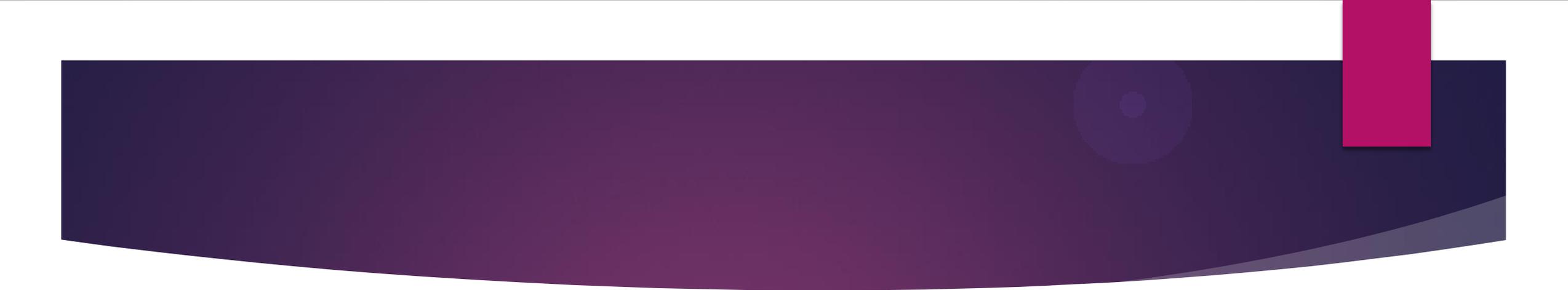
- roast vegetables without added fat;
- keep serving sizes small, especially if having a treat;
- limit takeaway foods;
- avoid rich cakes and pastries – use low fat products or (cake/muffin/biscuit) recipes for the occasional treat such as a birthdays;
- try rice cakes and honey or jam without margarine
- instead of margarine on bread, use condiments such as mustard or low fat mayonnaise.

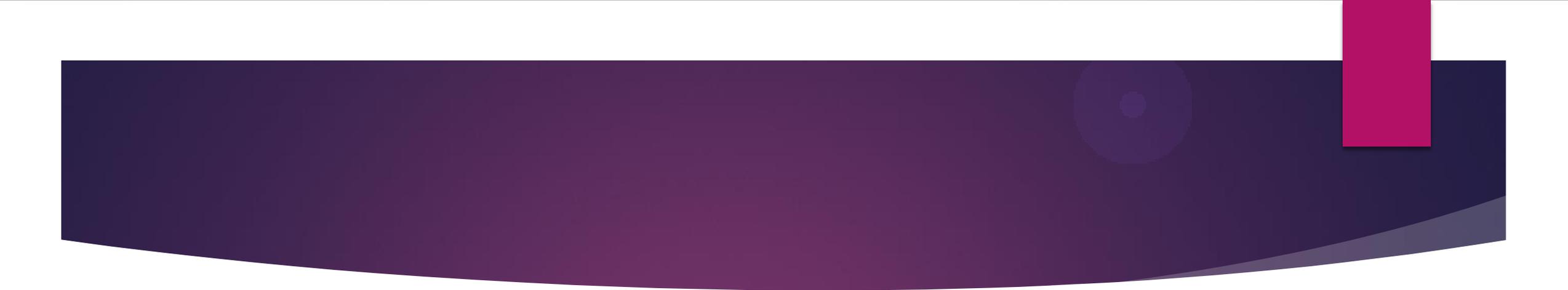
# Good sources!!!

- ▶ Good source of carbohydrate, protein, fibre, B vitamins and iron
- ▶ Choose wholemeal or multigrain varieties for fibre, - porridge, cooked rice
- ▶ Choose lower fat options (eg 97% fat free)
- ▶ **aim for 4 serves/day**
- ▶ **A bread serve is:**
- ▶ 1 slice bread ½ bread roll/1 small dinner roll 1 crumpet ½ cup cooked rice/pasta/noodles
- ▶ ½ cup cooked porridge
- ▶ 1 cup unsweetened cereal (Cornflakes/  
Rice Bubbles/Special K)
- ▶ ¼ cup untoasted muesli

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- ▶ Good source of carbohydrate, folate, vitamin C and fibre
    - > Where possible, leave skin on fruits
    - > Minimise fruit juice
  - Avoid excessive dried fruit
  - ▶ **aim for 2 serves/day**
  - ▶ 1 medium piece fresh fruit (apple, orange, pear, banana)
  - ▶ 2 small pieces fresh fruit (apricots, kiwi fruit, plums)

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- ▶ Good source of carbohydrate, vitamins, minerals and fibre
  - > Fresh, frozen or canned vegetables are all suitable
  - > Avoid adding sauces to vegetables (eg cheese sauce)
  - Vegetables should occupy the majority of the plate
  - ▶ **aim for 2 serves/day**
  - ▶ 1 medium potato
  - ▶ 1 cup cooked vegetables
  - ▶ ½ cup legumes (baked beans)
  - ▶ 1-2 cups salad/raw vegetable

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- ▶ Good source of protein, calcium, riboflavin and vitamin B12
  - Use reduced fat versions:
  - ▶ **aim for 3 serves/day**
  - ▶ 1 cup skim milk
  - ▶ 2 slices extra light cheese (choose varieties that are less than or equal to 10g fat/100g)
  - ▶ 1 small carton (200g) diet yoghurt
  - ▶ ½ cup low fat cottage cheese



▶ Good source of protein, iron, niacin and vitamin 12

> Trim fat off meat before cooking

➤ Grill or dry fry meat/fish; beef, tuna

▶ **aim for 1.5 serves/day**

▶ 40g meat or chicken

▶ 50g fish

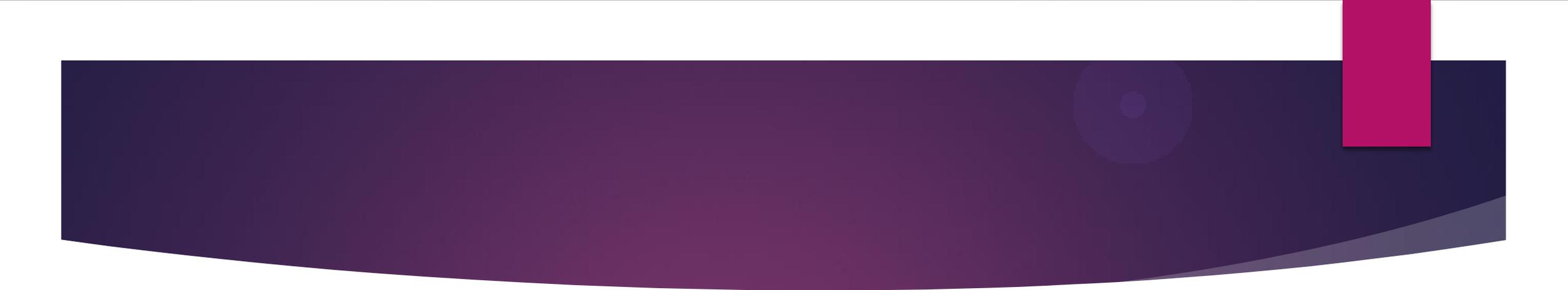
▶ 1 egg

▶ 1/3 cup legumes

▶ 2 tablespoons nuts

# Tips for managing food intake

- ▶ • offer smaller serve sizes and use smaller plates;
- ▶ • follow a diet plan;
- ▶ • teach the 'my plate' versus 'your plate' concept;
- ▶ • maintain a routine, with consistent snack and meal times, and venue;
- ▶ • limit access to food - store food in lockable cupboards, lock the fridge and prevent access to bins;
- ▶ • ensure constant supervision around food;
- ▶ • be prepared and have low joule foods and snacks available;
- ▶ • allow siblings who do not have PWS to consume 'secret' snacks and food treats;
- ▶ • teach the child with PWS about appropriate food choices;

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- ▶ • reward good food choices;
  - ▶ • plan ahead for parties and rehearse restaurant choices;
  - ▶ • inform all caregivers of the strict diet and ensure they comply;
  - ▶ • ensure regular activity and reduce periods of inactivity;
  - ▶ • if food related treats are unavoidable, plan something small on an occasional basis
  - ▶ • always encourage your child to drink water - having a special water bottle may help;
  - ▶ • control child's access to money to ensure it is not used for additional food
  - ▶ • prepare child for unusual circumstances when food may be accessible and teach them to notify you or their caregiver if this situation occurs.

# Minimise the energy intake

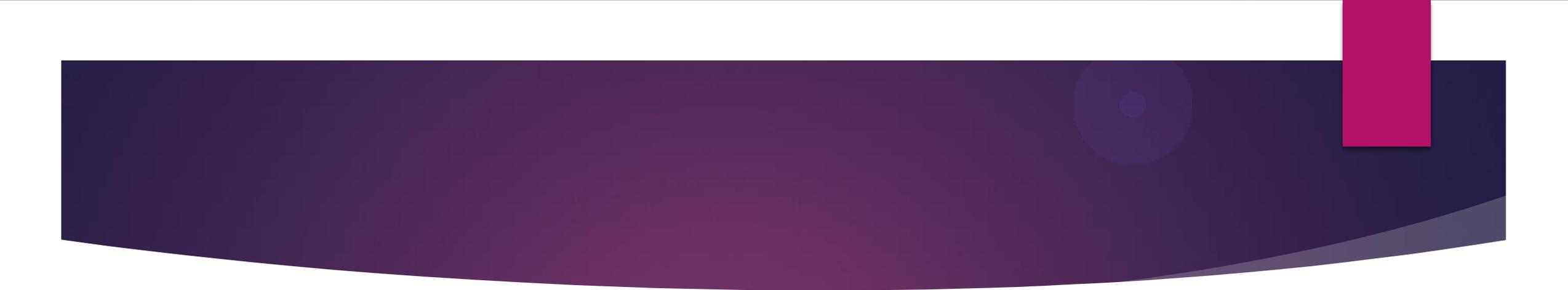
- ▶ • diet or low kcal drinks contain no energy/calories/kJ so taking advantage of this by offering it as a treat is a win/win. Add lots of ice if you wish;
- ▶ • diet jelly also contains no energy and can be used for a treat or dessert;
- ▶ • frozen fruit can make a special change;
- ▶ • ice blocks made from diet cordials;
- ▶ • a small serving of low fat ice-cream;
- ▶ • small amounts of sugar free lollies – they often have approximately 20kcal, so in small amounts are an acceptable treat
- ▶ • rice cakes and honey or jam without margarine.

# attention

- ▶ should be aware that a low energy diet may be lacking in fat soluble vitamins such as A, D, E and K. Iron, Zinc and calcium intake may be low as well.
- ▶ it may be a good idea to include small amounts of healthy fats, such as a monounsaturated oil as part of the diet plan determined by your dietitian.
- ▶ Additionally, including at least 2 serves of fish each week will add quality fats (essential fatty acids) to diet. Essential fatty acids protect the body against heart disease, are important for a healthy immune system, and for the development of the brain and retina.

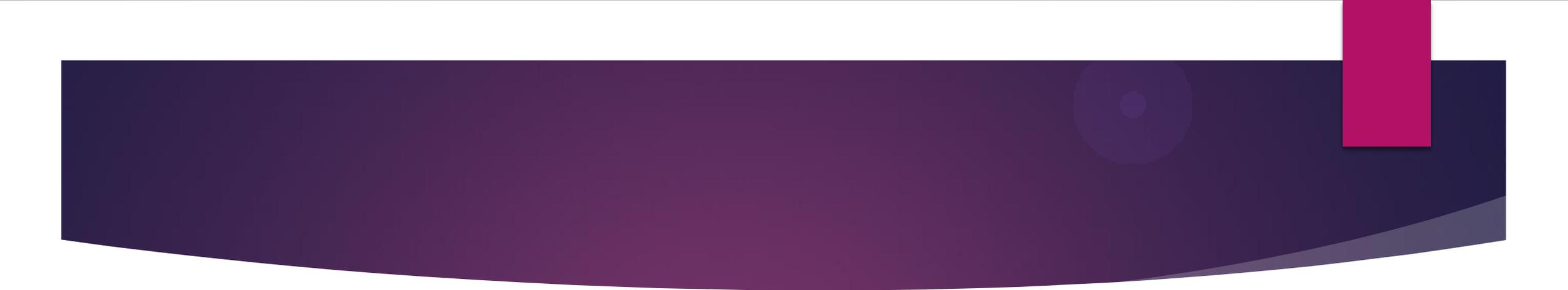
# Safety concern related to eating

- ▶ As children with PWS have a reduced ability to vomit and an impaired ability to feel pain, this places them at particular risk if they do consume these substances - need to be on guard to keep toxic substances out of reach, to prevent children from eating food out of rubbish bins, and to prevent them from consuming inedible substances. Any sign of stomach ache or discomfort needs to be taken very seriously, and parents/carers need to seek urgent medical attention.

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- ▶ Constipation is also common in children with PWS and occurs when your child has a hard, dry bowel motion that is painful to pass
    - include high fibre cereal alternatives in your child's diet (ie whole grain or whole meal cereals and breads);
      - where possible keep the skin on fruit and vegetables;
      - ensure that child drinks plenty of water;
      - ensure that child has plenty of exercise and keeps active.

## Success is most likely when routines are established

- ▶ **Energy In = Energy Out** results in no net weight gain
- ▶ **Energy In > (greater than) Energy Out** results in weight gain
- ▶ **Energy in < (less than) Energy Out** results in weight loss



Thank you !!!