

PROTEIN COUNTED & FREE

Vegetables & Fruit in MSUD



Fruits and vegetables are healthy and low in protein, making them an important part of the diet for MSUD. These lists, which are based on leucine content, should be used for counting fruit and vegetables. If a fruit/vegetable comes in packaging with a nutrition information panel (NIP) the following rules apply:

- If it contains only free (uncounted) fruit/vegetable e.g. canned tomatoes with basil, do not count these foods
- If the fruit/vegetable is combined with other foods which you would normally count e.g. with flour in a fruit bar use the value as per the packaging NIP.

Counted Fruit

Most fresh, frozen & canned fruits do not need to be counted on a low protein diet. Only a small number of fruits need to be counted if eaten in larger amounts. Dried fruits generally contain more leucine than fresh, frozen or canned fruits. If you eat large amounts of any dried fruit not listed below talk to your metabolic dietitian as it may need to be counted. The weight of edible fruit equivalent to one gram (1g) of protein is listed below.

APRICOT
(DRIED)



55g

BANANA



85g

BLACKBERRIES



70g

CURRENT
(DRIED)



35g

CUSTARD
APPLE



70g

DATES



95g

FIGS
(DRIED)



70g

GOJI BERRIES



20g

Please note that images pictured do not reflect the weights listed

Counted Fruit

The weights listed for each of the fruits below is equivalent to one gram (1g) of protein.

GRAPEFRUIT
(APPROX. ONE FRUIT)



260g

JACKFRUIT



80g

LYCHEE



90g

MULBERRY



45g

PASSIONFRUIT
PULP



35g

POMEGRANATE
SEEDS



55g

QUANDONG



40g

RAISINS



30g

SULTANAS



85g

TAMARILLO



50g



Please note that images pictured do not reflect the weights listed

Counted Vegetables

The weights listed for each of the vegetables below is equivalent to one gram (1g) of protein.

ARTICHOKE



45g

ASPARAGUS
(FRESH)



60g

ASPARAGUS
(CANNED)



85g

AVOCADO



85g

BAMBOO
SHOOTS
(CANNED)



85g

BEANS, GREEN



75g

BOK CHOY



90g

BROCCOLI



35g

BROCCOLINI



35g

BRUSSEL'S
SPROUTS



55g

CAPERS



40g

CHINESE
CABBAGE



90g

Please note that images pictured do not reflect the weights listed

Counted Vegetables

The weights listed for each of the vegetables below is equivalent to one gram (1g) of protein.

CAULIFLOWER



60g

CELERIAC



60g

CORN KERNELS



25g

FENNEL



90g

KALE



40g

KOHLRABI



95g

LEEK



60g

MUSHROOMS



65g

OKRA



85g

PARSNIP



85g

PEAS



25g

PUMPKIN
(EXCEPT JARRAHDALE)



60g

Please note that images pictured do not reflect the weights listed

Counted Vegetables

The weights listed for each of the vegetables below is equivalent to one gram (1g) of protein.

<p>PUMPKIN (JARRAHDAL ONLY)</p>  <p>180g</p>	<p>RHUBARB</p>  <p>65g</p>	<p>ROCKET</p>  <p>30g</p>	<p>SHALLOT</p>  <p>55g</p>
<p>SILVERBEET</p>  <p>60g</p>	<p>SNOW PEAS</p>  <p>30g</p>	<p>SPINACH</p>  <p>45g</p>	<p>SPROUTS (BEAN / ALFALFA)</p>  <p>35g</p>
<p>SQUASH</p>  <p>125g</p>	<p>SWEET POTATO</p>  <p>65g</p>	<p>TARO</p>  <p>85g</p>	<p>TOMATOES (SUNDRIED)</p>  <p>15g</p>

Please note that images pictured do not reflect the weights listed

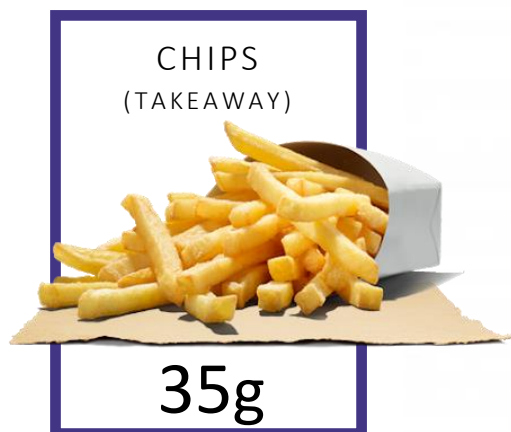
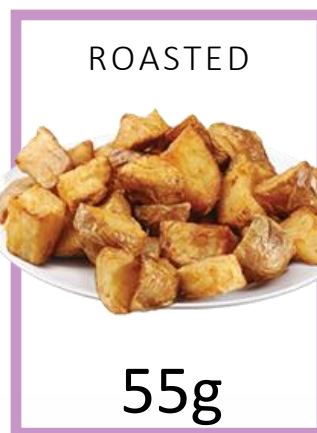
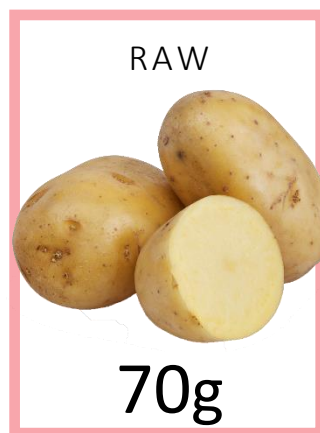
Counted Vegetables

The weights listed for each of the vegetables below is equivalent to one gram (1g) of protein.



Potatoes

The leucine content of potatoes depends on the cooking method. The weight of potato equivalent to one gram (1g) of protein is listed below.



Please note that images pictured do not reflect the weights listed

Examples

Now that you know the weight of various fruits and vegetables equal to 1g of protein you can use a calculator and kitchen scales to determine how much protein is in your portion size with this calculation:

Weight of fruit or vegetable

÷

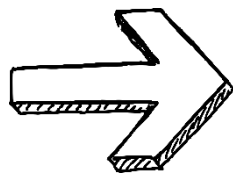
Weight equal to 1g protein

=

Grams of protein

Example 1: Spinach

STEP 1: Place a plate or bowl on your kitchen scales and set them to zero (or TARE).



STEP 2: Place the amount of spinach you intend to eat on the scales. In this case it is 157g.

Weight equal to 1g protein

STEP 3: Use the calculation:

Weight of
vegetables (g)

157

÷

SPINACH



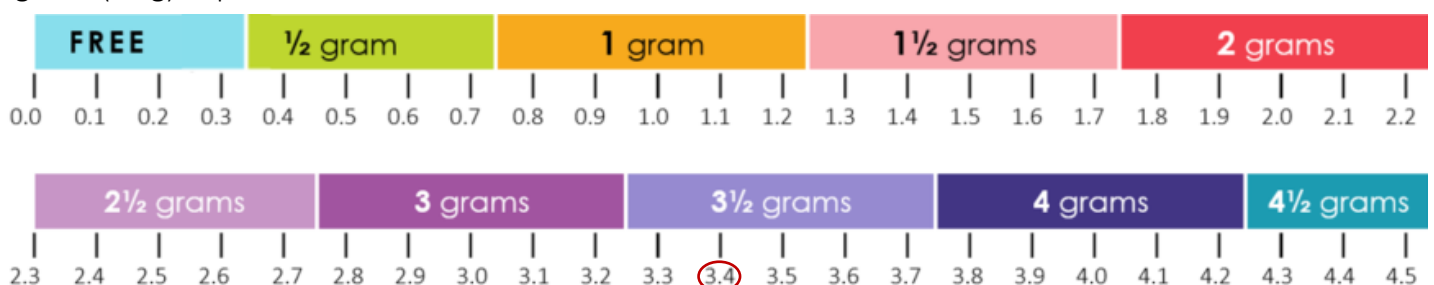
45g

Grams of
Protein

=

3.4889

STEP 4: Round to the nearest half gram of protein. If you find this difficult use scale below (you only need to use the first number after the dot, ignore the others). In this example 157g spinach contains 3½ grams (3.5g) of protein.



Weight of fruit or vegetable

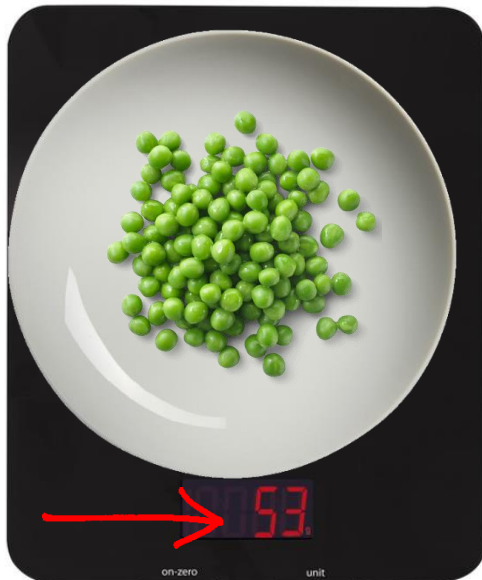
÷

Weight equal to 1g protein

=

Grams of protein

Example 2: Peas



Weight of
vegetables
(g)

53

÷

Weight equal to 1g protein



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In this example 53g of peas contains 2 grams (2g) of protein when rounded to the nearest half.

Example 3: Corn kernels

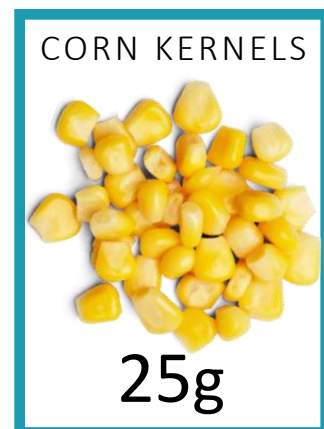


Weight of
vegetables
(g)

37

÷

Weight equal to 1g protein

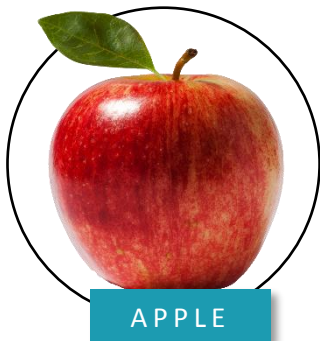


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In this example 37g of corn kernels contains 1½ grams (1.5g) of protein when rounded to the nearest half.

Protein Free Fruit List

The fruits and vegetables in the following lists do not need to be counted in the MSUD diet if standard portion sizes are used. Although these foods are classified as “protein free” they still contain small amounts of leucine. If you eat large portions of any of these foods talk to your dietitian about whether this should be counted.



APPLE



APRICOT
(FRESH ONLY)



BLUEBERRIES



CHERRIES



CRANBERRIES
(FRESH OR DRIED)



CUMQUAT



CURRENTS
(FRESH ONLY)



DRAGONFRUIT



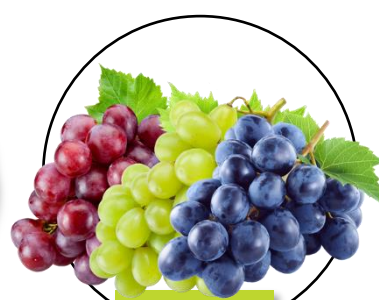
FEIJOA



DURIAN



FIG (FRESH ONLY)



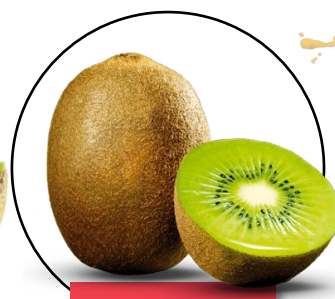
GRAPES



GUAVA



HONEYDEW MELON



KIWIFRUIT



LEMON & LIME

Protein Free Fruit List



LONGAN



LOQUAT



MANDARIN



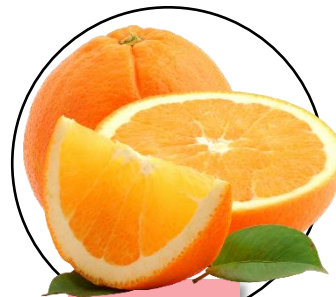
MANGO



MANGOSTEEN



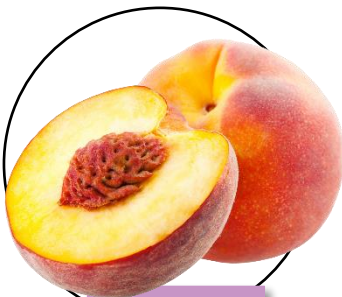
NECTARINE



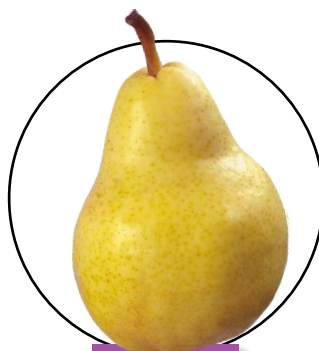
ORANGE



PAWPAW (PAPAYA)



PEACH



PEAR



PERSIMMON



PINEAPPLE



PLUM



PRICKLY PEAR

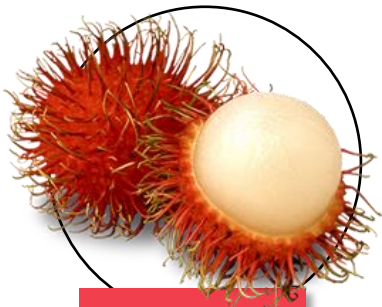


PRUNES



QUINCE

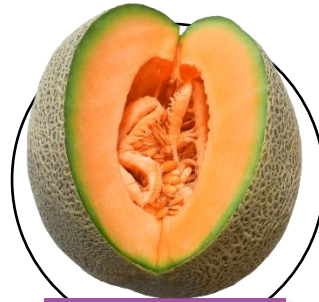
Protein Free Fruit List



RAMBUTAN



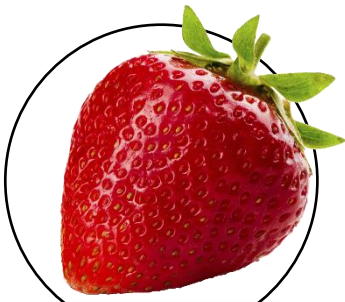
RASPBERRY



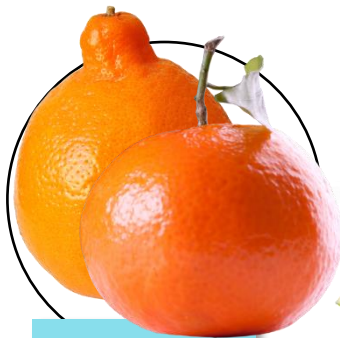
ROCKMELON



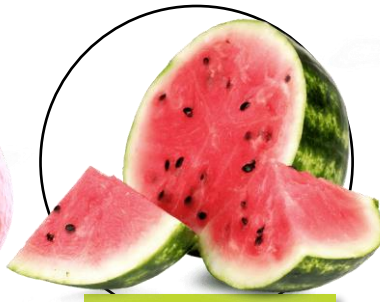
STARFRUIT



STRAWBERRY



TANGELO &
TANGARINE



WATERMELON



WAX JAMBU

Protein Free Vegetable List



BEETROOT



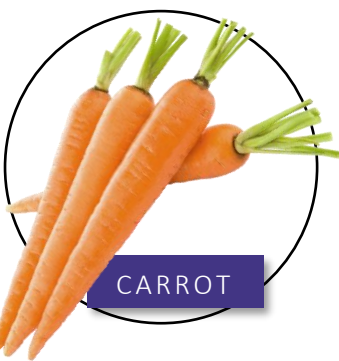
BITTER MELON



CABBAGE (SAVOY / RED
/ WHITE / MUSTARD)



CAPSICUM



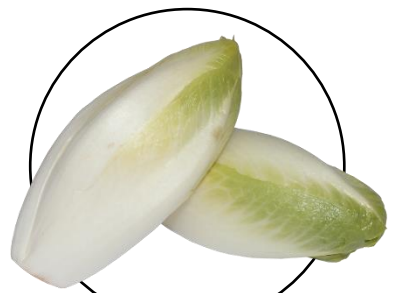
CARROT



CASSAVA



CELERY

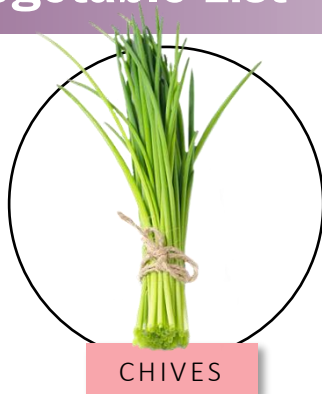


CHICORY

Protein Free Vegetable List



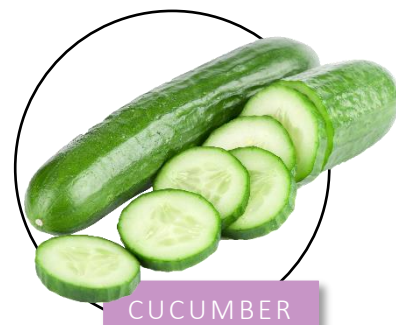
CHILLI



CHIVES



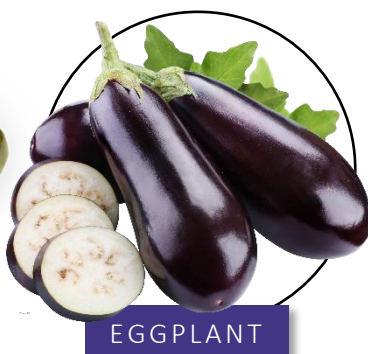
CHOKO



CUCUMBER



GHERKIN



EGGPLANT



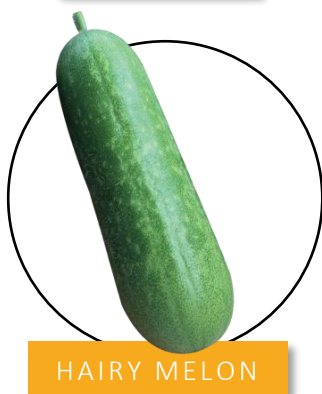
ENDIVE



GARLIC



GINGER

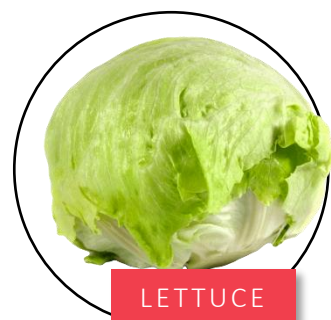


HAIRY MELON



HERBS

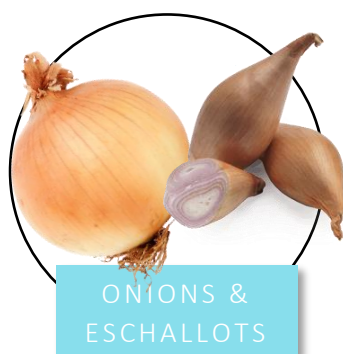
If large quantity eaten
(e.g. tabouli, basil
pesto) ask your
dietitian if you need to
count



LETTUCE



OLIVES



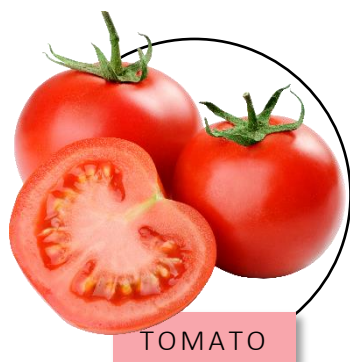
ONIONS &
ESCHALLOTS



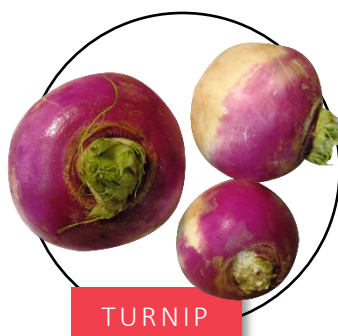
RADISH



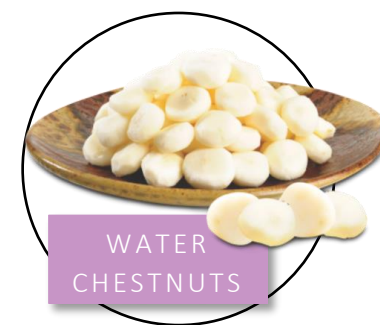
SWEDE



TOMATO



TURNIP



WATER
CHESTNUTS