

# DIETARY FATS AND TODDLERS FACTSHEET



## WHY ARE DIETARY FATS IMPORTANT FOR TODDLERS?

**Fat is an important part of the diet, performing different functions. Fat provides energy that is needed for normal growth (9kcal/g)<sup>1</sup>; carries fat soluble vitamins, helping the body absorb vitamins A, E and D<sup>2</sup>; provides essential fatty acids, which the body can't make for itself<sup>2</sup>; provides structure for the developing brain which is 60% fat<sup>3</sup>.**

### The composition of fats, and where to find them:

Fat is composed of different fatty acids, whose chemical structure denotes their classification: either monounsaturated fatty acid (MUFA), polyunsaturated fatty acid (PUFA), or saturated.

- MUFA are found mainly in plant foods such as olive oil, nuts and avocados<sup>4</sup>.
- PUFA can be found in most plant oils, oily fish, nuts and seeds<sup>4</sup>.
- Saturated fat is generally solid at room-temperature and is found mainly in meat and full fat dairy products, also coconut oil and palm oil<sup>4</sup>. Too much saturated fat raises cholesterol and may lead to increase risk of heart disease<sup>2</sup>.

### What about omega-3 and omega-6?

There are some PUFA that are essential in the diet as the body can't build them: linoleic acid (LA) (omega-6), and alpha linolenic acid (ALA) (omega-3)<sup>4</sup>. These are short chain fatty acids, that the body can convert into long chain fatty acids to use.

### Omega-6:

LA converts to Arachidonic Acid (ARA)

Short chain omega-6 can be found mainly in vegetable oils, nuts, seeds, meats, and eggs and is abundant in most diets<sup>5</sup>.

Long chain ARA can be found mainly in animal-derived products and vegetable oils.

### Omega-3:

ALA converts to Eicosapentanoic Acid (EPA) and Docosahexaenoic Acid (DHA)

Short chain omega-3 can be found mainly in seeds and nuts such as flaxseed, or walnuts

EPA and DHA can also be eaten preformed in the diet, oily fish being the main source, but they can also be found in other foods including meat or eggs if the animals were fed omega-3 in their diet<sup>4</sup>, and seaweed or algae. DHA is the most abundant fatty acid found in the brain and is needed for brain and retina development<sup>6</sup>. These PUFA can be deficient in the diet of 1-3 year olds<sup>7</sup>.

Breastmilk always provides the long chain PUFAs ARA and DHA<sup>8</sup>. For infant and follow on formula, it is now mandatory for them to contain DHA, but not all infant formula's contain ARA<sup>9</sup>. Guidelines say that toddler milk can play a role in contributing to the intake of omega-3 for 1-3 year olds<sup>7</sup>.

Young children need the energy provided by fat so it is important that they stay on full fat dairy until 2 years of age, after which if they are eating and growing well, they can transition onto semi-skimmed milk<sup>10</sup>.

#### REFERENCES:

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