Conclusions of the Committee

In this guide

131. Ginger is commonly used as a spice and flavouring in many countries worldwide and is growing increasingly in popularity as a natural remedy, due to its purported immunostimulatory properties, for easing motion sickness and post-operative nausea and vomiting, and pregnancy related nausea.

132. Several ginger supplements are commercially available, ranging from dried root in capsule form to tincture form, all with varying amounts of ginger. In addition to this, concentrated ginger shots (liquid form), containing large amounts of pressed ginger, are becoming increasingly popular. The variability in the composition of these supplements adds uncertainty to the amount of active ginger actually being consumed.

133. A number of the studies noted that the toxicity observed varied according to the nature of extraction solvent; organic solvent extracts exhibited more toxicity than aqueous extracts, which presumably indicates extraction of differentially toxic compounds.

134. Overall, the Committee concluded that based on the available information it was not possible to determine a point of departure to use in the risk assessment of ginger when used as a supplement.

135. Members noted that although the different ginger extracts were not comparable across animal studies, there was evidence for some biological effects in the early stages of pregnancy. It was stressed that in general there was no indication of systemic toxicity in pregnant women or to the fetus from the use of ginger in the diet as food.

136. The lack of safety and toxicological information available on ginger use in pregnancy overall make it difficult to fully characterise the risks in this respect.

The committee noted that while there was some equivocal evidence for effects of ginger on reproduction in experimental animals, it was not possible to characterise this based on the data available.

137. Also, consumption data was based on women of childbearing age and therefore may not be representative of the maternal diet, leading to an under/overestimation of the actual exposure. The Southampton Women's Survey assessed the diet of a large group of non-pregnant women aged 20 to 34 years living in the city of Southampton (Inskip, 2006). Women (n=12,583) were recruited between April 1998 and December 2002. For the women who subsequently became pregnant similar information was collected. Compared with the period before pregnancy, there were marked decreases in alcohol and caffeinated drink intake, however, there was little change in overall levels of fruit and vegetable consumption. It is unlikely that this captures potential supplement use or specific dietary modifications to address pregnancy-related conditions such as nausea, but it does indicate that there is overall similarity between the diets of women of childbearing age and pregnant women (Crozier, 2009).

138. There is no clear indication that ginger is detrimental to pregnant women or the developing fetus or embryo, although there are some signals for potential adverse effects. Generally, consumption of ginger in a traditional culinary manner within a diet is not considered a health concern. The Committee noted that from the evidence presented, the potential for contamination of ginger with heavy metals and/or mycotoxins cannot be excluded.

139. The COT concluded that there is no evidence to support changing the current NHS advice to pregnant women. The NHS currently recommends trying foods or drinks containing ginger as one of the approaches that might ease

symptoms of morning sickness but emphasises that during pregnancy a person should check with a pharmacist before taking ginger supplements (NHS, 2024).