TABLE 5.2

Suggested iron fortificants for specific food vehicles

Food vehicle	Fortificant
Low extraction (white) wheat flour or degermed corn flour	Dry ferrous sulfate
	Ferrous fumarate
	Electrolytic iron (×2 amount)
	Encapsulated ferrous sulfate
	Encapsulated ferrous fumarate
High extraction wheat flour, corn flour, corn masa flour	Sodium iron EDTA
	Ferrous fumarate (×2 amount)
	Encapsulated ferrous sulfate (×2 amount)
	Encapsulated ferrous fumarate (×2 amount)
Pasta	Dry ferrous sulfate
Rice[a]	Ferric pyrophosphate (×2 amount)
Dry milk	Ferrous sulfate plus ascorbic acid
Fluid milk	Ferric ammonium citrate
	Ferrous bisglycinate
	Micronized ferric pyrophosphate
Cocoa products	Ferrous fumarate plus ascorbic acid
	Ferric pyrophosphate (×2 amount) plus ascorbic acid
Salt[a]	Encapsulated ferrous sulfate
	Ferric pyrophosphate (×2 amount)
Sugar[a]	Sodium iron EDTA
Soy sauce, fish sauce	Sodium iron EDTA
	Ferrous sulfate plus citric acid
Juice, soft drinks	Ferrous bisglycinate, ferrous lactate
	Micronized ferric pyrophosphate
Bouillon cubes[a]	Micronized ferric pyrophosphate
Cereal-based complementary foods[b]	Ferrous sulfate
	Encapsulated ferrous sulfate
	Ferrous fumarate
	Electrolytic iron (×2 amount)
	All with ascorbic acid (≥2 : 1 molar ratio of ascorbic acid: Fe)
Breakfast cereals	Electrolytic iron (×2 amount)

EDTA, ethylenediaminetetraacetic acid

[a] Technical problems, specifically sensory changes and/or segregation, still exist with the iron fortification of these food vehicles.

[b] Recent evidence has indicated that infants may only absorb ferrous fumarate 25% as well as adults; so concentrations of poorly soluble iron compounds in complementary foods may need to be adjusted to allow for this.

eaten and on the level of fortification. Iron compounds suitable for the fortification of specific food vehicles are listed in **Table 5.2**.

5.1.5.1 Wheat flour

The nutritional usefulness of iron fortification of wheat flour has recently been confirmed in an efficacy study in Thailand (*242*). In that study the relative

Source:- Guidelines on food fortifications with Micronutrients.
By WHO & FAO of United Nations.