Fig. 1

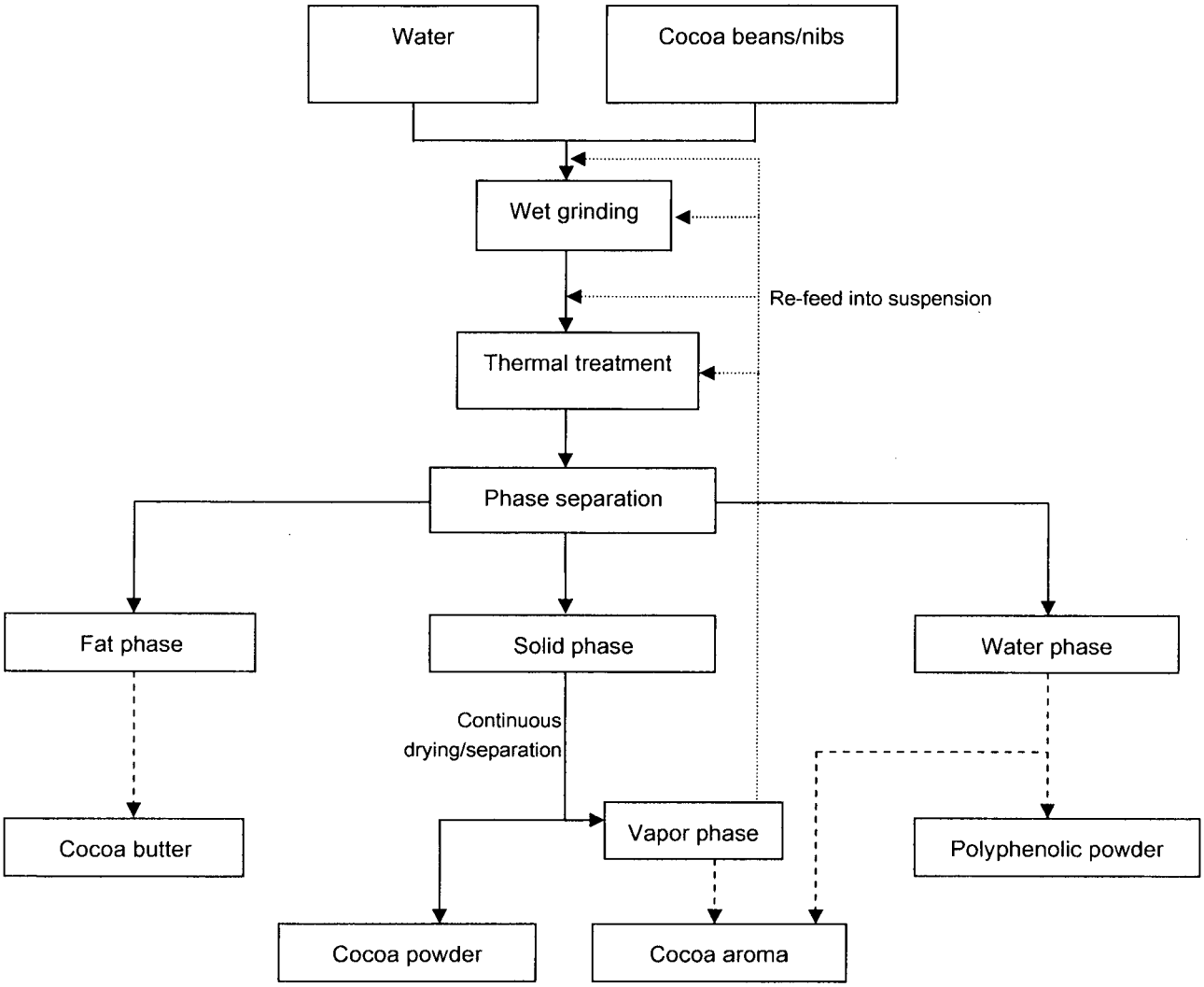

Water
Cocoa beans/nibs
Wet grinding
Re-feed into suspension
Thermal treatment
Phase separation
Fat phase
Solid phase
Water phase
Continuous drying/separation
Cocoa butter
Vapor phase
Polyphenolic powder
Cocoa powder
Cocoa aroma

**Fig. 2**

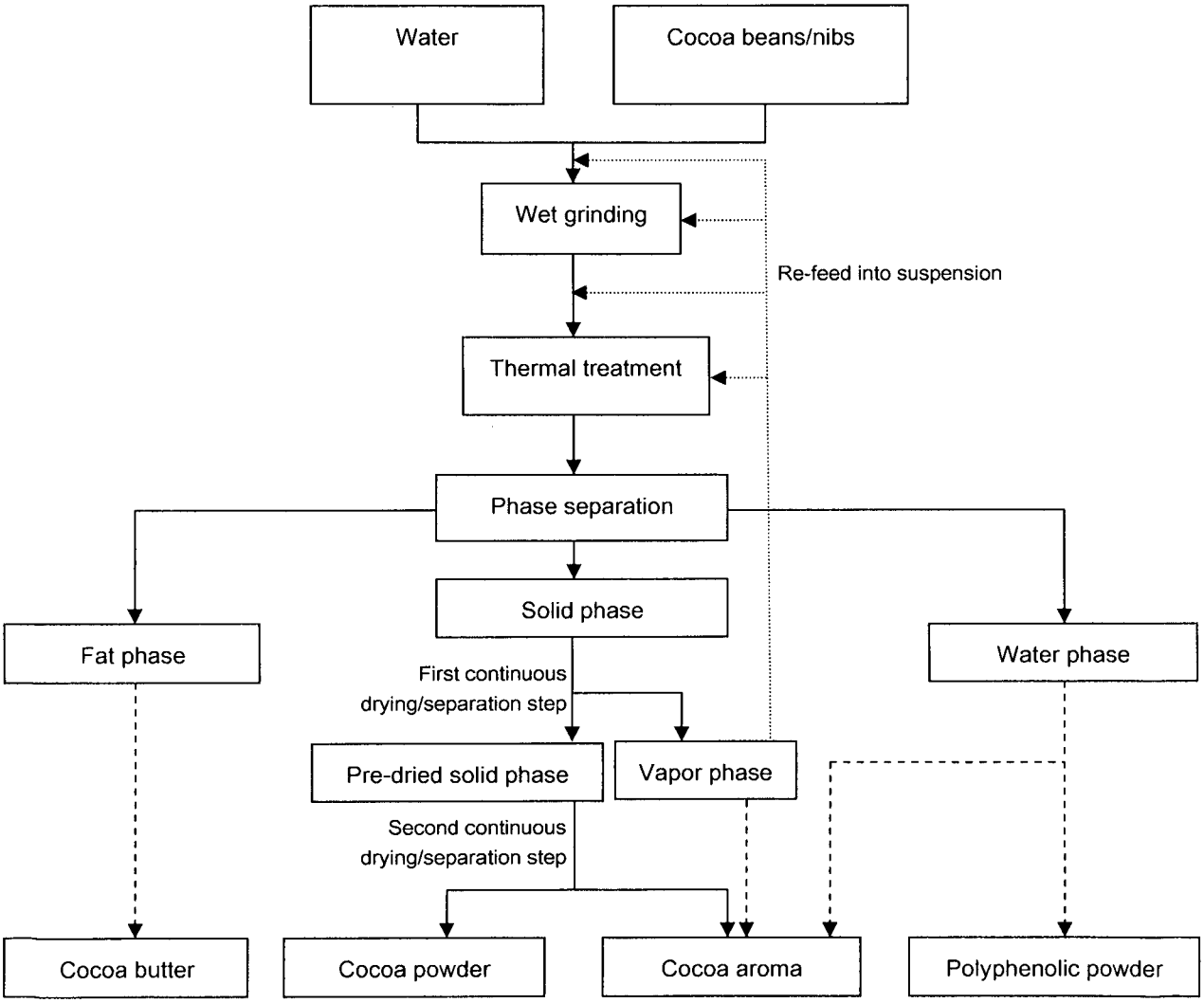

Water
Cocoa beans/nibs
Wet grinding
Re-feed into suspension
Thermal treatment
Phase separation
Solid phase
Fat phase
Water phase
First continuous drying/separation step
Pre-dried solid phase
Vapor phase
Second continuous drying/separation step
Cocoa butter
Cocoa powder
Cocoa aroma
Polyphenolic powder

Fig. 3

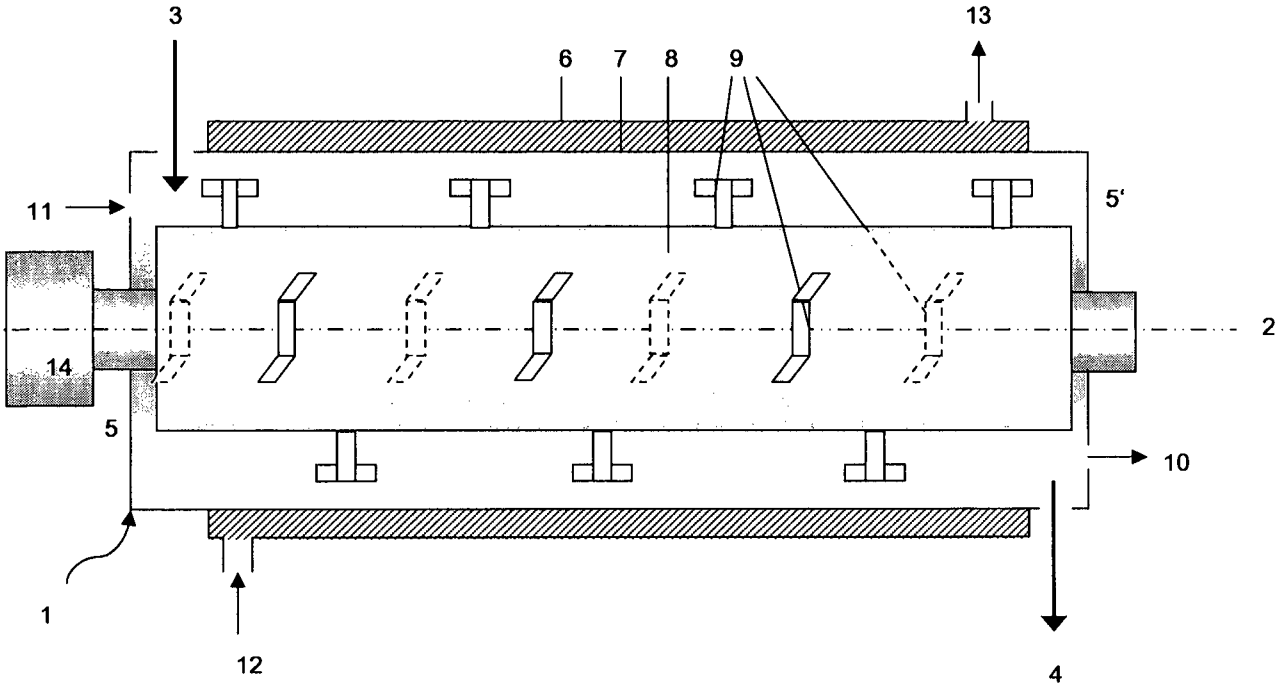


Fig. 4

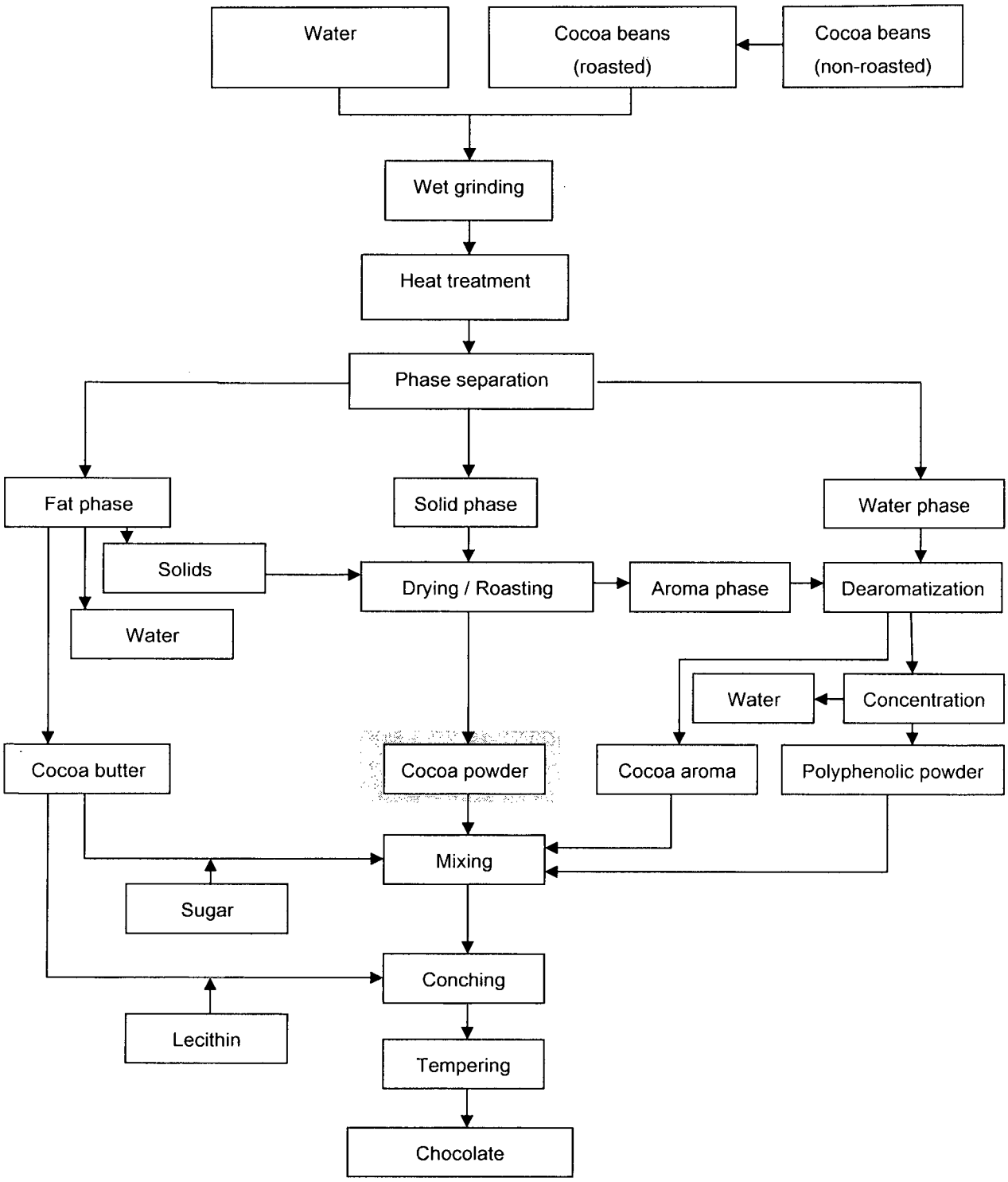
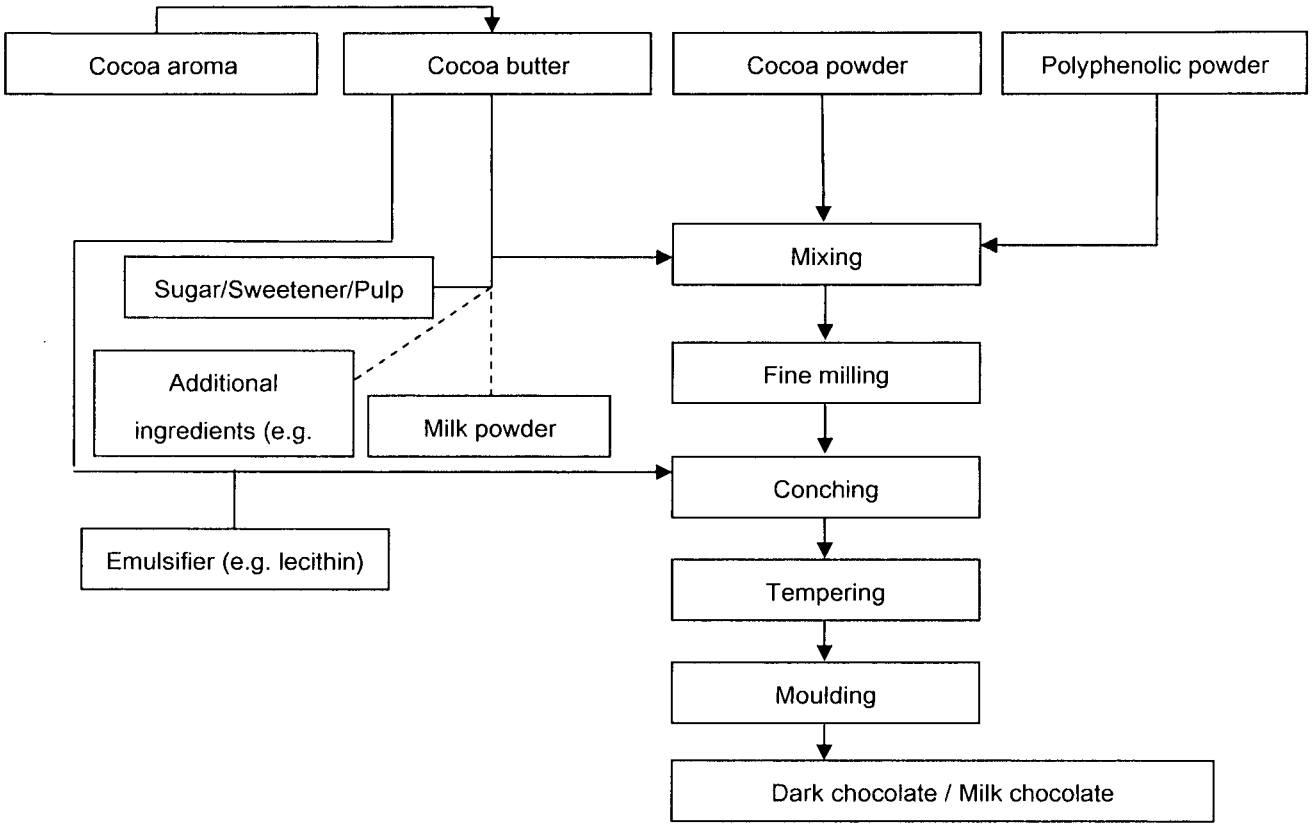

Water
Cocoa beans (roasted)
Cocoa beans (non-roasted)
Wet grinding
Heat treatment
Phase separation
Fat phase
Solid phase
Water phase
Solids
Drying / Roasting
Aroma phase
Dearomatization
Water
Water
Concentration
Cocoa butter
Cocoa powder
Cocoa aroma
Polyphenolic powder
Mixing
Sugar
Conching
Lecithin
Tempering
Chocolate

Fig. 5


Cocoa aroma
Cocoa butter
Cocoa powder
Polyphenolic powder
Sugar/Sweetener/Pulp
Additional ingredients (e.g.
Milk powder
Emulsifier (e.g. lecithin)
Mixing
Fine milling
Conching
Tempering
Moulding
Dark chocolate / Milk chocolate