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Appendix: Abbreviations, acronyms and organisations

Cd	Cadmium (heavy metal)
CMAA	Cocoa Merchants' Association of America
CODEX	Codex Alimentarius Commission: produces international food standards.
ECA	European Cocoa Association
FAO	Food and Agricultural Organization of the United Nations
FCC	Federation of Cocoa Commerce
FDA	Food and Drug Administration of the USA
FLO	Fairtrade Labelling Organisations International
ICE	InterContinental Exchange. Futures trading market.
ICI	International Cocoa Initiative. A partnership between, NGOs, cocoa trade and processors focussing on child labour
ICA (formerly IOCCC)	International Confectionery Association (source of ICA/IOCCC analytical methods)
ICCO	International Cocoa Organisation
OTA	Ochratoxin A (a mycotoxin produced by moulds)
PAH	Polycyclic aromatic hydrocarbons
Pb	Lead (heavy metal)
RA	Rainforest Alliance, a biodiversity and sustainability NGO
UTZ	A certification and traceability scheme
WCF	World Cocoa Foundation

CHAPTER 3

Production of cocoa mass, cocoa butter and cocoa powder

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3.1 Introduction

Cocoa flavour is the most distinctive feature of chocolate and depends, amongst other things, upon the raw materials used, especially the cocoa beans. The processing, in particular roasting, is also very important in developing the desired chocolate flavour.

Following bean or nib roasting, the cocoa nib is ground into cocoa mass, which is a liquid when hot but solid at room temperature. The final intended use determines how finely it is ground. When using the two and five roll refiner system to make chocolate (Chapter 9), the fineness of the cocoa mass is of less importance than when the mass is added directly into the conche, as is the case for the production of high cocoa content chocolates. The latter requires the cocoa nibs to be very finely ground.

Cocoa nibs must also be finely ground when making cocoa powder; otherwise the product may have a sandy mouthfeel or a poor visual appearance.

Cocoa butter is normally produced by pressing, which is often followed by steam treatment under vacuum conditions (deodorisation). Cocoa butter is mainly used for the production of chocolate where taste and solidification characteristics are important. These can be influenced by the choice of raw materials and the processing applied.

3.2 Cleaning of cocoa beans

After harvesting, fermenting and drying, cocoa beans may be exported from the country of origin (see Chapter 2). Transport is in bags, bulk containers, or in ships' holds. For many years the latter has been very popular and is widely used. The "grinding" or processing of cocoa beans in their country of origin has also expanded rapidly. Nowadays the production of cocoa mass, and even

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