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CHAPTER 26

Packaging

Carl E. Jones

26.1 Introduction

This chapter starts by looking at the different types of chocolate products and how they are packaged. The chapter covers foil and paper, twist wrap and flow wrap formats in addition to outlining carton overwrapping, carton board and corrugated board. The various main packaging materials are reviewed as to their particular beneficial properties and where they should be used, before moving on to sustainability and portion control.

26.2 Confectionery types

26.2.1 Moulded chocolate tablets and bars

For many years, moulded chocolate bars remained relatively unchanged with minimal barrier protection required from the packaging. However, with the use of “inclusions” such as cereals and nuts (e.g. crisped rice, hazelnuts), the protection required from the packaging has increased.

Traditional chocolate bars utilised tinfoil and paper-band over wrap packaging; today, aluminium foil has replaced tinfoil (Figure 26.1) with some formats employing a full cover paper or paperboard envelope-style overwrap. The typical thickness of aluminium foil for bars without inclusions is $10\mu\text{m}$ (0.39×10^{-3} in) whereas, for bars with inclusions that may damage the foil, it should be thicker [$12\text{--}14\mu\text{m}$ (0.47×10^{-3} to 0.55×10^{-3} in)]. Improved barrier protection against infestation, odours and water vapour can be provided by the application of heat-sealable coatings or polyethylene (PE) linings.

In the United Kingdom and some other countries around the world, flow wrap packaging for tablets has largely replaced foil and paper packaging (Figure 26.2). Faster wrapping speeds, lower cost packaging materials and reduced labour have encouraged the use of flow wrap formats. In addition, in many countries flow wrap packaging is seen as modern while foil and paper is seen as outdated. However, foil and board packages are used for premium tablet formats.

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