**Figure 26.1** Tablets in foil and paper and foil and board formats.



Modern flow wrap equipment with very precise pack cut-off/repeat lengths (±0.1 mm) has largely removed the need for cardboard inserts in the pack to prevent tablet breakage and/or keep the tablet stable should the tablet become broken.

Twelve to 36 tablets are typically packed into a box known as an outer (in some countries known as an inner) or display box (Figure 26.3). These outers are placed into a corrugated case for transportation. Microflute corrugated outers and display boxes have become very common in West European countries in recent years. Fully printed boxes, made with E, F and N flute (see Section 26.4.2) provide additional strength and in many circumstances eliminate the need for corrugated shipping cases. Tablets laid on edge generally provide the strongest stacking configuration, allowing for lower-strength and therefore lower-cost outers.

## 26.2.2 Chocolate countlines

The "countline" is the core of the large-scale chocolate business in many countries. It is typically an enrobed irregular shaped product in contrast to the uniform shape of a tablet. Flow wrap packaging formats dominate the countline market.



Figure 26.2 Tablets flow-wrap format.



Figure 26.3 Shelf ready display box.

The flow wrap (Figure 26.4) can provide barrier protection for the product or hold a number of pre-wrapped products (multi-pack). Varying the structure of the film can modify the barrier properties of the package to prevent ingress of moisture vapour, gases, odours and light, or to prevent the loss of flavour.

White chocolate does not contain the anti-oxidants present in milk and dark chocolate and therefore requires packaging with light barrier properties such as metallised films to prevent light-induced oxidative rancidity. In addition, countlines containing nuts can find shelf life extended by light-excluding packaging.

The outer packaging and shipping case packaging for countlines is essentially the same as that for moulded tablets; however, in most cases countlines are laid flat in the box and are very often in display boxes. Because flow wrap countlines have extended end seals and tend to have large amounts of trapped air within the wrapper, more free space may be required inside the outer box compared to moulded tablets. This means that distribution costs can be higher. However, modern high-speed flow wrap equipment can be fitted with air reduction systems to minimise the size of the outer box.