**Text of examples Module 3.6**

The concept of chocolate having potential therapeutic benefits for people with diabetes mellitus, especially type 2 diabetes mellitus, presents a number of intellectual challenges, from both clinical and sociological perspectives. It seems almost counterintuitive to suggest an energy-dense food that is high in sugar, and often seen as a treat or a “dietary sin”, could offer such promise. However, a large volume of mechanistic and animal model studies has been undertaken demonstrating the potential benefits of cocoa and chocolate for both glucose regulation and modification of complications associated with diabetes. Cesar Fraga in the *American Journal of Clinical Nutrition* first proposed the potential of chocolate for people with diabetes in 2005. It was suggested that we should consume more cocoa and chocolate to reduce the burdens of hypertension and diabetes.(1) Grassi and colleagues (2) further reinforced this potential for its antihypertensive and insulin-sensitizing effect with the mechanistic data. However, the hypothesis of chocolate having a beneficial effect remains counterintuitive to the average consumer and has yet to gain support among the wider medical and healthcare community.

**Many mechanistic and animal studies suggest health benefits for cocoa and chocolate, particularly for patients with hypertension and type 2 diabetes mellitus. These studies suggest that cocoa and chocolate can lower blood pressure, improve glucose regulation, improve insulin sensitivity, and reduce complications from diabetes. But the idea of chocolate as medicine has yet to gain widespread support among consumers or among the wider medical and healthcare community. It seems counterintuitive that a high-sugar, energy-dense food —one often seen as a treat or “dietary sin”— could promote health.**

Headache is an extraordinarily common pain symptom that virtually everyone experiences at one time or another. As a pain symptom, headaches have many causes. The full range of these causes were categorized by the International Headache Society (IHS) in 1988. The IHS distinguishes two broad groups of headache disorders: primary headache disorders and secondary headache disorders. Secondary headache disorders are a consequence of an underlying condition, such as a brain tumor, a systemic infection or a head injury. In primary headache disorders, the headache disorder is the fundamental problem; it is not symptomatic of another cause. The two most common types of primary headache disorders are episodic tension-type headache (ETTH) and migraine. Although IHS is the most broadly used/recognized classification system used, a brief comment on others would be appropriate – especially if there are uses that have epidemiologic advantages.

**Headache is a pain symptom that almost everyone experiences. The International Headache Society (IHS) groups headaches into two types based on cause: primary headache disorders and secondary headache disorders. In primary headache disorders, the headache itself is the main complaint. The two most common types of primary headache disorders are episodic tension-type headache (ETTH) and migraine. Secondary headache disorders result from an underlying condition, such as a brain tumor, a systemic infection, or a head injury.**