nutrition travels through a tube which has been intubated into the oral tract, usually through the nose. A physician may choose liquid nutrition specific to the patient from many commercially available nutritional formulas.

[004] One type of liquid nutrition container used in the industry is a ready-to-hang plastic bottle. The bottle may include a mouth covered by a hermetic seal and a neck which is male threaded. In many enteral feeding systems, a removable cap is attached to the neck of the bottle. To initiate flow of the nutrition, the seal is removed by a caregiver, mechanically broken or otherwise compromised. The tube connecting the container to the patient has a proximal end, relative the caregiver, which may include a connector or otherwise have structure adapted for connection to the cap.

Summary

[005] The present application describes parts and assemblies for use in enteral feeding, such as for example, a cap suitable for use with a ready-to-hang plastic bottle.

[005a] In one embodiment, there is provided a cap suitable for use in enteral feeding from a container, the cap comprising:

a base having a top surface, a bottom surface, and an outer ring, the top surface having a protruding port suitable for insertion of a spike connector and the outer ring configured for attachment to a container having a mouth, wherein the protruding port defines a spike insertion chamber extending from a spike connector insert aperture to a spike connector outlet aperture; and

an insert cutter having a first end portion attached to the bottom surface of the base and about an edge of the spike connector outlet aperture and a second end portion extending over at least a portion of the spike connector outlet aperture;

wherein the insert cutter is capable of flexing at a hinge in an insertion direction of a spike connector inserted through the spike insertion chamber.

[005b] In one embodiment, there is provided a cap for use in enteral feeding from a container of liquid, the container having a mouth covered by a seal, the cap comprising:

a ring having a female threaded inner surface for attachment to the container;

a disk fixed to an upper edge of the ring, the disk having a top surface and a bottom surface, the

top surface having a protruding port suitable for insertion of a spike connector, wherein the protruding port defines a spike insertion aperture; and

an insert cutter having a first end and a second end, the first end attached to the bottom surface of the disk;

wherein the insert cutter is capable of flexing about a hinge in an insertion direction of a spike connector inserted through the spike insertion aperture.

[005c] In one embodiment, there is provided an assembly for use in enteral feeding, the assembly comprising:

a container having a mouth covered by a foil seal;

a cap having a top surface, a bottom surface, and an outer ring, the top surface having a protruding port suitable for insertion of a spike connector and the outer ring configured for attachment to the mouth of the container, wherein the protruding port defines a spike insertion chamber extending from a spike connector insert aperture to a spike connector outlet aperture; and

an insert cutter having a first end portion attached to the bottom surface of the cap and about an edge of the spike connector outlet aperture and a second end portion extending over at least a portion of the spike connector outlet aperture;

wherein the insert cutter is capable of flexing in an insertion direction of a spike connector inserted through the spike insertion chamber.

[006] In an exemplary embodiment, a cap includes a base and an insert cutter. The base has a top surface, a bottom surface, and an outer ring, the top surface having a protruding port suitable for insertion of a spike connector and the outer ring configured for attachment to a container having a mouth. The protruding port defines a spike insertion chamber extending from a spike connector insert aperture to a spike connector outlet aperture. The insert cutter has a first end portion attached to the bottom surface of the base and about an edge of the spike connector outlet aperture and a second end portion extending over at least a portion of the spike connector outlet aperture. The insert cutter is capable of flexing at a hinge in an insertion direction of a spike connector inserted through the spike insertion chamber.

[007] In another embodiment, an assembly includes a container having a mouth covered by a foil seal, a cap, and an insert cutter. The cap has a top surface, a bottom surface, and an

outer ring, the top surface having a protruding port suitable for insertion of a spike connector and the outer ring configured for attachment to the mouth of the container. The protruding port defines a spike insertion chamber extending from a spike connector insert aperture to a spike connector outlet aperture. The insert cutter has a first end portion attached to the bottom surface of the cap and about an edge of the spike connector outlet aperture and a second end portion