WHAT IS CLAIMED IS:

1. A syringe tip cap comprising:
   a body having a annular side wall having an inside surface defining a chamber, an open proximal end, a closed distal end including a distal wall;
   a protruding boss having a finger contact surface that extends from the annular sidewall of the tip cap away from the annular sidewall, the finger contact is configured for applying digital force to the finger contact surface to allow the single-handed movement of the tip cap from a closed sealed position to an open unsealed position to remove the tip cap from the barrel of the syringe;
   and the distal wall includes a centrally situated collar having a projecting side wall forming an inside cavity configured to envelop around an elongated tip of a syringe, an open proximal end, and a distal end adjacent the distal wall of the tip cap.

2. The syringe tip cap of claim 1, wherein the collar includes one or more tapered projecting sidewalls.
3. The syringe tip cap of claim 1, wherein the annular side wall includes one or more tapers.
4. The syringe tip cap of claim 1, wherein the finger contact surface has a stepped, scalloped or graded configuration to improve grip.
5. The syringe tip cap of claim 1, further comprising:
   a finger stop disposed on the protruding boss.
6. The syringe tip cap of claim 5, wherein the collar includes one or more tapered projecting sidewalls.
7. The syringe tip cap of claim 5, wherein the annular side wall includes one or more tapers.
8. The syringe tip cap of claim 5, wherein the finger contact surface has a stepped, scalloped or graded configuration to improve grip.
9. The syringe tip cap of claim 5, wherein the finger stop is disposed on the protruding boss at the distal end of the body of the syringe tip cap.

10. The syringe tip cap of claim 5, wherein the finger stop is disposed along a length of protruding boss near the center of protruding boss.
11. The syringe tip cap of claim 1, further includes a protrusion 13 in the shape of a centrally situated pin or button.
12. The syringe tip cap of claim 11, wherein the protrusion (13) is disposed on the inside surface (11) of the distal wall (22) and extends proximally into the inside cavity (32).
13. The syringe tip cap of claim 11, wherein the protrusion (13) is sized and configured to fluidly block a lumen 55 of the elongated tip 54 of the syringe 540.
14. The syringe tip cap of claim 13, wherein the protrusion 13 has a diameter equal to or slightly larger than a diameter of the lumen 55 of the elongated tip 54 configured to fluidly cove the lumen 55.
15. The syringe tip cap of claim 13, wherein the protrusion 13 has a diameter equal to or slightly less than a diameter of the lumen 55 of the elongated tip 54 and the protrusion 13 is configured to protrude slightly into the lumen 55 and fluidly seal the lumen 55.