Use of the Insulin Syringe

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Insulin is sold in five strengths, U 10, U 20, U 40, U 80, and U 100. The numbers signify the number of units per cubic centimeter of the preparation in solution. Insulin luer syringes may be purchased with scales for each of these strengths which make accurate measurement very simple. The most common strength of insulin used is U 40 or U 80. It is advisable, therefore, to purchase a syringe of the U 40 and U 20 scales.

The markings for each strength are on a separate scale. One must be very sure, therefore, that the strength of insulin ordered corresponds with its particular scale. Readings should be checked. It is well if it can be arranged to have one check by another person rather than the one who has prepared the dose.

The doctor will order the number of units, expecting the nurse to use the most desirable strength. Supposing the order for insulin is:

20 units before breakfast.
10 units before lunch.
12 units before supper.

Scale to be used with insulin marked-U20-

Scale to be used with insulin marked-U40

Insulin Syringe

In such a case it would be advisable to purchase U 40 insulin, for the smallest dose would be one-quarter cubic centimeter of solution and the largest half a cubic centimeter, thus making a smaller amount of fluid to be injected.

If an insulin luer is not available any 2 cubic centimeter syringe or tuberculin syringe (which has more minute and accurate markings), may be used if the nurse remembers that the strength of insulin denotes the number of units in each cubic centimeter and uses that part of a cubic centimeter.

Example:

15 units ordered = U 40 insulin on hand.

Calculate in the following way:

15/40 = \( \frac{3}{8} \). Give \( \frac{3}{8} \) cubic centimeter.