DoseCalc 4.1

A stand-alone program for calculating pediatric medication doses

Features:

- Easily calculate doses for both oral (PO) and intravenous (IV) medications
- Adjust up / down to convenient rounded-off doses
- Calculate dispense volume for PO meds
- Convert from kg to lb and oz, and back
- Keyboard, Drop-down lists, and hardware buttons facilitate easy data entry
- Set preference for style of fractions (¼ vs. 1/4)
- Edit list of doses and solutions
- Affordable registration $18.75, with free future -updates and bug-fixes
- "Lefty Compliant" - program adjusts to accommodate both left and right handed users
- Color and Black/white compatible
- History of recent calculations stored in log that can be saved to the MemoPad
- Compatible with Palm OS 5.0 with high resolution graphics
- Integrates with RxCalc for easy prescription printing

Requirements:

Palm OS version 3.5 or higher, with at least 200 kb of free memory

Introduction:

This program is intended to assist in the repetitive task of calculating medication doses.

Enter weight in either pounds (lb) and ounces (oz) or in kilograms (kg) or stones using either the keyboard or with the Graffiti® pad.

Choose the medication details including dose per weight, doses per day, and solution concentration from available lists, or enter the details directly using either the keyboard or with the Graffiti® pad.
Drop-down lists of common doses are available where each small down-arrow ▾ is found.
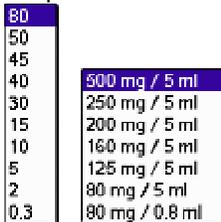
Select the dosing information from the drop-down lists, including medication dose, doses per day, and medication form (solution, pills, etc.)

```
400mg / 5ml
250mg / 5ml
200mg / 5ml
125mg / 5ml
50mg / 1ml
875mg Tab
500mg Tab Pill
400mg Chew
```

The left arrow is for backspace, and the up/down arrows or the hardware buttons can be used to move from one field to the next.

When all the details are entered, calculate the answer by pressing Answer
The dose answer can then be rounded up or down in small increments by pressing ⬆⬇

Clear calculations here Clear

Send to RxPrint - this will send the information calculated to the RxPrint program. This only works if RxPrint is installed on the PDA.

Edit drop-down lists

The lists for doses and solutions are now editable

Dosing
80
50
45
40
30
15
10
5
2
0.3

(OK) (New) (Edit) (Delete) ▲ ▼

Solutions
500 mg / 5 ml
250 mg / 5 ml
200 mg / 5 ml
160 mg / 5 ml
125 mg / 5 ml
80 mg / 5 ml
80 mg / 0.8 ml

(OK) (New) (Edit) (Delete) ▲ ▼
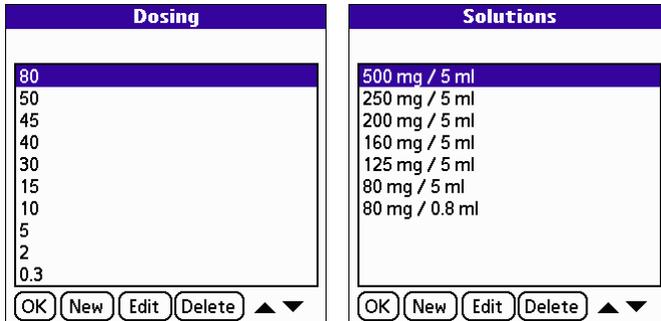
Switch PO/IV route

Toggle between oral (PO) and intravenous (IV) medication calculations by pressing these buttons:

PO/IV Indicates current mode is PO, press this to switch to IV calculation mode

IV/PO Indicates current mode is IV, press this to switch to PO calculation mode

Oral:
Choose dose units (mg/kg/day vs. µg/kg/day, etc.), and output is calculated accordingly in either mg or µg, and ml.

For any medication that is a single one-time dose, leave doses per day blank, or use 0 or 1 dose per day.

Doses are rounded to the nearest ¼ tsp if the 'Round-off doses' option is selected, and if medications are in tsp (5 ml) concentration. Other doses (droppers, etc.) are rounded to multiples / fractions of the dropper itself.

The final dose may be rounded up or down by ¼ tsp as desired and the resulting dose is recalculated in mg/kg/day at the bottom to verify how close to the desired dose.

Dispense volume may be calculated by choosing "Dispense quant." from menu at top. Pull-down list for number of days, or enter in space provided. Calculates automatically.
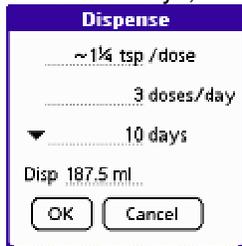
Intravenous:
Use this option for calculating IV drips.

Choose dose units from list (µg/kg/min, µg/kg/hr...), and output is calculated accordingly.

Enter as much information as is available, and the remainder will be calculated.

In order to calculate **how to mix a med**, enter the weight, dose, rate, and volume in which to mix the med. The program will calculate how to mix the med
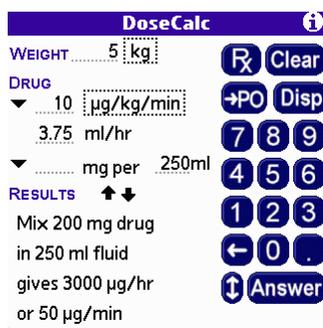
If the solution concentration is known, but you need to **find the rate** at which to run the drip, enter the child's weight, dose, and solution concentration. The program will calculate the rate, and dose rate.

DoseCalc

WEIGHT 5 kg

DRUG
▼ 10 µg/kg/min
ml/hr
▼ 200 mg per 250ml
RESULTS ↑ ↓
0.06 ml/min
3.75 ml/hr
50 µg/min
3000 µg/hr

Rx Clear
→PO Disp
7 8 9
4 5 6
1 2 3
← 0 .
↕ Answer

If all the information is known, the program will **confirm the calculation** accuracy

DoseCalc

WEIGHT 5 kg

DRUG
▼ 10 µg/kg/min
3.75 ml/hr
▼ 200 mg per 250ml
RESULTS ↑ ↓
50 µg/min
3000 µg/hr

Rx Clear
→PO Disp
7 8 9
4 5 6
1 2 3
← 0 .
↕ Answer

If all information is provided, the program will check calculations, and correct were erroneous:

DoseCalc

WEIGHT 5 kg

DRUG
▼ 10 µg/kg/min
5 ml/hr
▼ 200 mg per 250ml
RESULTS ↑ ↓
Error, try one of these...
13.33 µg/kg/min
3.75 ml/hr
150 mg in 250 ml

Rx Clear
→PO Disp
7 8 9
4 5 6
1 2 3
← 0 .
↕ Answer

History:

A running history of recent calculations is kept in a log. This history can be saved to the MemoPad for future reference, or to be HotSync'ed to the desktop computer for permanent storage and/or printing.
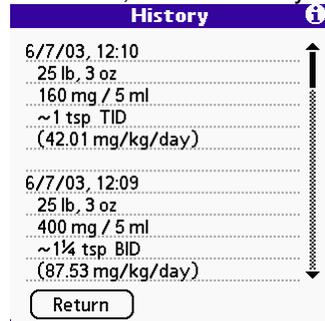
Shareware:

This program is shareware. It is provided for you without any features disabled. You may use it for up to one month, after which time you will need to register if you would like to keep using the program. If you find it useful, please register at www.PalmGear.com. I ask only $18.75 to help defray the cost of programming, and help funding future projects. If you register, all future bug-fixes and upgrades of the basic dose calculator will be free.

If you have any comments or questions, feel free to contact me at joadler@pocket-doc.com.

Thank you for your support.

Registration:

Please visit the website below and send $18.75 with your Palm User Name, and I will send you a registration code.

http://palmgear.com/software/showsoftware.cfm?sid=32237320020304220827&prodID=9768

Version history:

4.1 - Improved graphics, fixed history for pills, now interacts with RxPrint
4.0.1 - Fixed User Name recognition for PalmOS 5.0
4.0 - Lists are now editable, high resolution icons, fixed a minor but in the IV med calculations
3.2 - "Lefty Compliant", fixed to work with Palm OS version 5.0
3.1 - Fixed bug with IV rate calculation
3.0 - Now with both PO and IV calculations, and improved history
2.0 - Improved screen visibility, and now with ability to store the log of recent calculations, and transfer to MemoPad for saving to the desktop computer, and/or printing.
1.5.0 - Color added, improved medication drop-down list, more accurate lb <-> kg conversion
1.4.1 - Fixed minor bug in estimating teaspoons.
1.4.0 - Doses can now be rounded up above 4 tsp (unlimited rounding), drop-down lists have been included for doses. The trial period is now limited to one month to encourage user registration.
1.3.0 - Adjust dose up/down, added hardware buttons
1.2.1 - Added small icon, allowed for calculation with single dose/day, produced Left-handed calculator, fixed minor bug with rounding-off routine
1.2.0 - Fixed preferences menu to be more user-friendly, back button, and Fixed incompatability with Menu-Hack®
1.1.0 - Version now compatible with Handspring Visor®
1.0.2 - Fixed kg <-> lb switch so that it converts the weight accurately
1.0.1 - Added edit menu
1.0.0 - Original version

Disclaimer:

This program is intended to aid in calculating medication doses. Every effort has been made to ensure the accuracy of the data and calculations. However, bugs may still exist. Use at your own risk. As with all reference sources, you should never rely solely on this or any single source of information. A primary (peer reviewed) source is always recommended.