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Please note that with autoISF 3.0 you are in an early-dev. environment, where the user interface is **not optimized for safety** of users who stray away from intended ways to use. Good safety features exist, but these are only as good as the development-oriented user understands and implements them. This is not a medical product, refer to disclaimer in section 0



12.1 Main innovations in autoISF 3.0

- You do not use an iobTH Automation but set the default iobTH as a percentage of iobMAX, and tune in a dynamic iobTH (settings in /preferences)
- **Automations** now come with a couple of autoISF related parameters for conditions and actions, making management of time blocks without aggressive autoISF much easier.
- Exercise management has received a couple of upgrades that auto-adjust insulin sensitivity ratio and iobTH. Also it provides the option to link into a stepcounter for activity monitoring.
- (not yet fully developed) FCL cockpit. FCL is basically about not interfering with your loop. But for the occasional need (especially in a exercise context) the AAPS main screen shows you at a glance the aggressiveness you are running in, and offers opportunity to temporarily soften or tighten it, within just a second or two.

The new Automation options allow

- (not yet developed) "Emergency exit". Beginners may appreciate the ease to turn back into hybrid closed loop by just pressing the loop icon in the AAPS main screen.. (Same goes for re-entry into FCL, of course). HCL would be with some autoISF functions (maybe you even came to FCL from HCL using dura_ISF from autoISF already), but because you are back making meal boli again, the meal detection+bgAccel_ISF part is off when you exit.
- (not yet developed) "Emergency brake". Users can temporarily block their loop from giving additional SMBs, by just pressing the loop icon and pressing one of the SUSPEND SMB (x min) buttons.

12.2 Implications regarding your previous tuning 34 35 36 Setting default iobTH 37 Check whether your maxIOB is reasonably set (IOB you maximally needed in the past). Then 38 define your default setting for iobTH threshold percent, so about the iobTH you were so far happy 39 with results. 40 As it now is dynamically adjusted, you may have to slightly re-tune after a few weeks of 41 experience. 42 43 Re-tuning ISF weights tuned for your average meal spectrum? 44 The new version may do a slightly better job. If you notice in your %TIR statistics more low outliers, 45 you may want to check out whether operating a 90% profile, or temp. taking back your set 46 SMB delivery ratio by ~ 10%, gets better results. 47 If so, you might want to shave off 10% from the core autoISF settings, and soon revert to your 48 100% profile and to your prior SMB delivery ratio. 49 50 Making use of the new options coming with Automations (new integrated autoISF parameters; User 51 action and grey extra cockpit buttons) 52 You could consider refining your former universal meal management, split jobs up, and seek 53 further improved overall TIR performance that way. 54 Besides standard %TIR (70-180) you may have to look into %TIR (70-140) also to see meaningful 55 improvements 56 57 Making use of the Activity Monitor 58 Investigate whether you can create some smoothing of your bg curves by getting Activity Monitor 59 on bord (and tune the two settings offered), 60

Taken together, the weights (maybe also some safety limits) might deserve some re-adjustment (if

you believe it is worth the effort for further stabilizing and optimizing your %TIR).

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- 64 Making use of the dynamic_iobTH and _ISF coming with extended exercise mode
- Develop refined ways to manage your sports in a higher degree of Automation, see discussion in
- 66 case study 6.2.

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This is can be a slowly on-going project, being steadily refined as exercise events occur.