Off flavours in beer

ACETALDEHYDE

OR GREEN APPLES TASTE

Is that an apple in your pocket

Or are you just happy to see me
Acetaldehyde (chemical CH₃CHO) is a naturally occurring organic compound that is found in everything from ripe fruit to coffee. It is frequently described as having a tart flavor reminiscent of green apples, and the flavor of dry cider also comes to mind.”

_Craft Beer and Brewer magazine._
So what's the problem?

Coffee and ripe fruit are pretty good, aren’t they?
Acetaldehyde is an intermediate compound in the conversion of glucose to ethanol.
Reducing Acetaldehyde CH₃CHO in brewing

- Good yeast health.
- Oxygen. Aerate the wort to give the yeast a good head start.
- Ferment at best temperature for yeast.
- When yeast has started producing Acetaldehyde it will prefer to seek oxygen than convert to ethanol. At this stage any oxygen available will produce acetate and leave the Acetaldehyde unconverted to ethanol.
- Under pitching yeast will leave portion of Acetaldehyde unconverted.
Apples are great for cider but in beer it’s a sign the yeast has not completed its job.
I've got it, now what?
Give the yeast a chance to clean up.
Finish fermentation to final gravity
Repitch fresh yeast as required

If all else fails
Store bottled beer at a temperature range closest to yeast best temperature.
Remember, if you have primed beer it will have a double conversion with the Acetaldehyde.
It will gush.