Start with the best possible ingredients!

Assuming that you are working with a digital camera, there are a number of choices you may be able to make that can make a big difference to the quality of your images.

1. If your camera allows you to do so, take RAW images.
2. Your camera may give you a choice of colour space. If so, prefer Adobe RGB (1998) to sRGB.
3. If your camera gives you the choice of file format, prefer TIF to JPEG.

Why?

- In order to produce a JPEG, your camera has to convert the RAW image it actually takes (even when it doesn't allow you to choose RAW) into a processed image. To do this, the camera "makes decisions" about colour and exposure correction, noise reduction and sharpening. In the process, a lot of the data recorded by your camera's sensor is thrown away and your options for post-processing the image are limited quite considerably.
- JPEG is a file format that compresses your image by discarding some of the data. Because of this, it is described as a lossy compression. Saving your images in TIF format, where you have the option, is better because TIF uses a lossless compression.
- The issue of colour space is a little more complicated and, arguably, debatable. It's discussed in further detail below.

sRGB or Adobe 1998

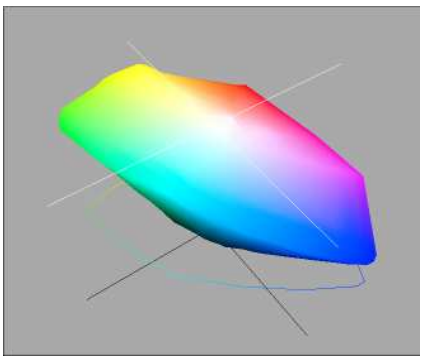
sRGB and Adobe RGB (1998) are just two examples of colour spaces. A colour space is essentially a three-dimensional graph in which every colour is represented by an individual point "in space" on the graph.

sRGB was designed for images intended to be viewed on a computer monitor. As such, it is the best option for use on the internet, for viewing in an e-mail message, and for projection using a digital projector.

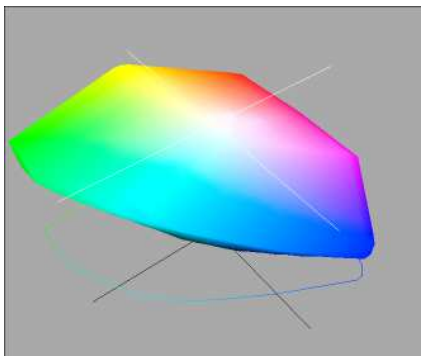
Adobe RGB (1998) is a larger colour space than sRGB. This means that it can display a wider range of colours. In the jargon, we say it has a larger "colour gamut". The diagrams below should give an idea of this.

Adobe RGB is a larger colour space than sRGB

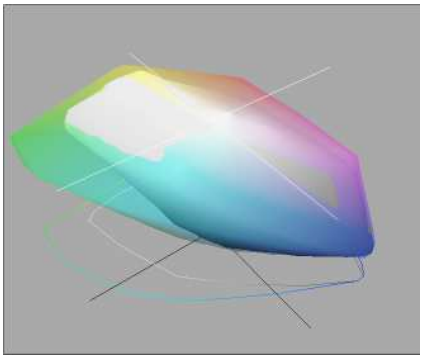
sRGB



Adobe RGB



sRGB & Adobe RGB



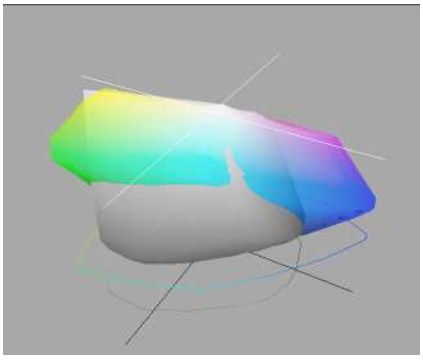
The inside shape represents sRGB. The larger shape shows the bigger colour space that is Adobe RGB.

Printers will sometimes print colours that fall outside either of these colour spaces.

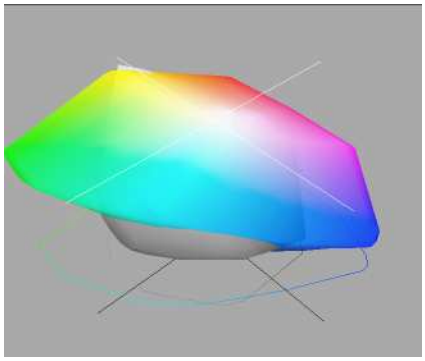
How this is reflected in the print

The following two examples compare the colours that can be printed using an Epson R2400 printer, with Epson ink and Epson Premium Glossy media.

sRGB



Adobe RGB



Areas shaded in grey represent colours that can be printed but that fall outside the colour space. Adobe RGB is a much better fit.

Note also that there are some colours in both colour spaces that cannot be printed on this paper. But that's another story!