Tooth Whitening

What Methods are there to Whiten teeth?

Tooth bleaching can be carried out using varying concentrations of Carbamide peroxide/ Hydrogen Peroxide Solution with a bleaching tray with varying treatment times.

The treatment times range from 30minutes to overnight, depending on the type and concentration of solution used.

A popular procedure is “In Chair Whitening” where the dentist whitens your teeth with a stronger solution under a controlled environment. The lips and soft tissues are all retracted and protected. Nowadays, light is not necessary and sensitivity from the procedure is minimal and short-lived.

Mechanism of tooth Whitening

Hydrogen peroxide and Carbamide peroxide are the active ingredients in tooth whitening.

Carbamide peroxide in a water based solution will break down into hydrogen peroxide in an approximate ratio of CP:HP, 3:1. It is ultimately the hydrogen peroxide which will breakdown into hydroxyl radicals which diffuse into the tooth and alter the carbon=carbon double bonds of pigmented molecules, thereby changing the optical properties of the pigmented molecules and resulting in a perception of colour change by the human eye.