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(54) **ENZYMATIC SYNTHESIS OF ANTIOXIDANT  
HYDROXYTYROSOL**

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(57) **ABSTRACT**

The reaction occurs in a medium buffered with phosphate in an aqueous medium, at neutral pH and at room temperature. Hence, the reaction medium consists of: tyrosol, as precursor; (commercial) mushroom tyrosinase to catalyze the process and vitamin C in excess. Reaction starts after initial shaking. The reaction stops when the concentration of the initial tyrosol is exhausted. In order for the reaction to continue, it will suffice to add more tyrosol (always ensuring that the vitamin C/tyrosol ratio is more than 1). Once the desired concentration of hydroxytyrosol is obtained, it is filtered. The enzyme with molecular weight over twice the size of the pore is retained in the filter and can be used once again. This first extract, which is very enriched in antioxidant hydroxytyrosol with a high antioxidant capacity (in the present case, in combination with vitamin C), can already be used as a food additive.