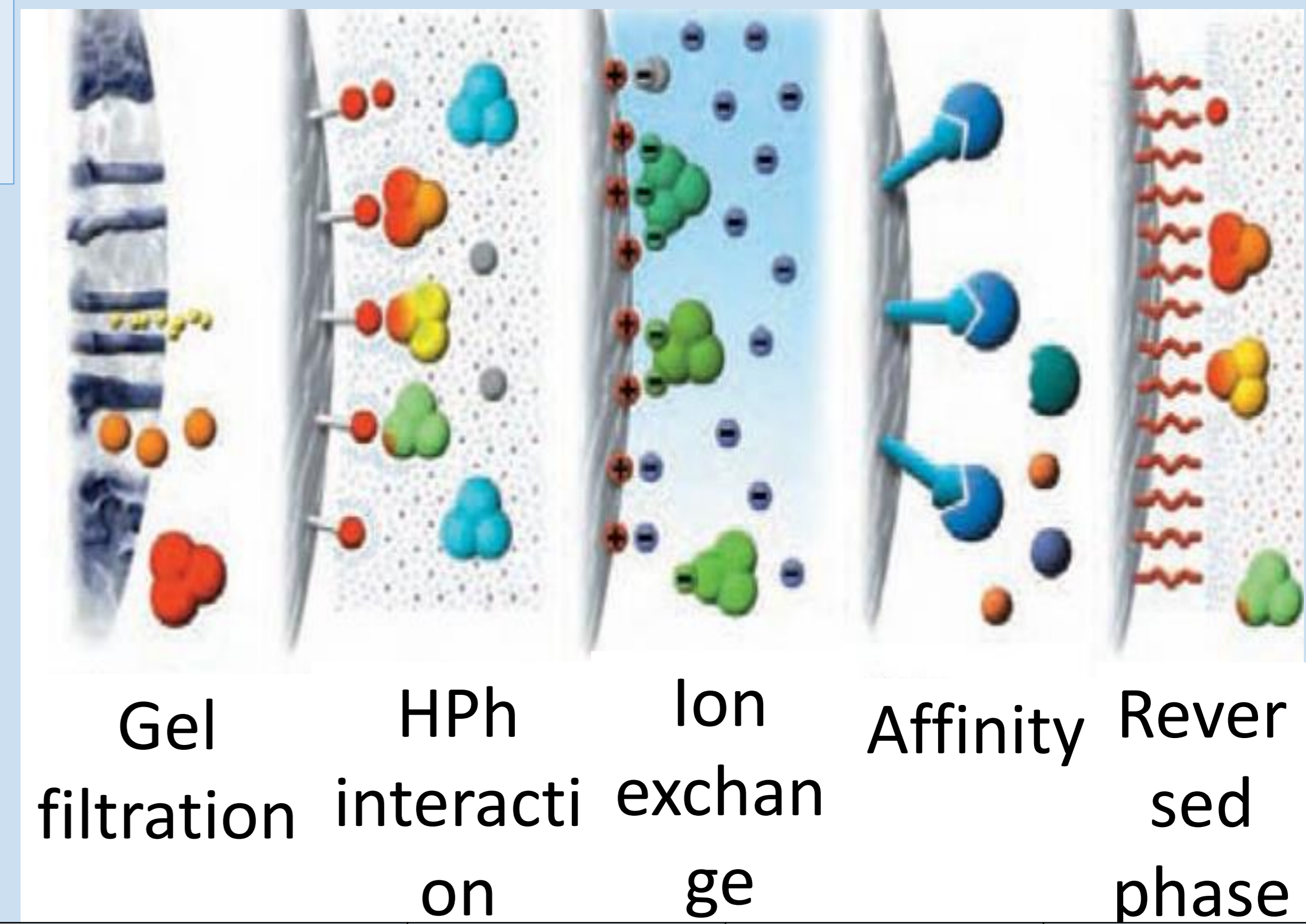


# BIOGENIC AMINES ON DIET. ANALYSIS BY CHROMATOGRAPHIC TECHNIQUES

**1. MOTIVATION AND OBJECTIVES** This paper is caring of the harm caused by biogenic amines really being in the diet with a high incidence in minor illnesses. Also will be mentioned in which foods are present, its origin, its detrimental effect and how determined and quantified analytically, giving his interest in f.safety.

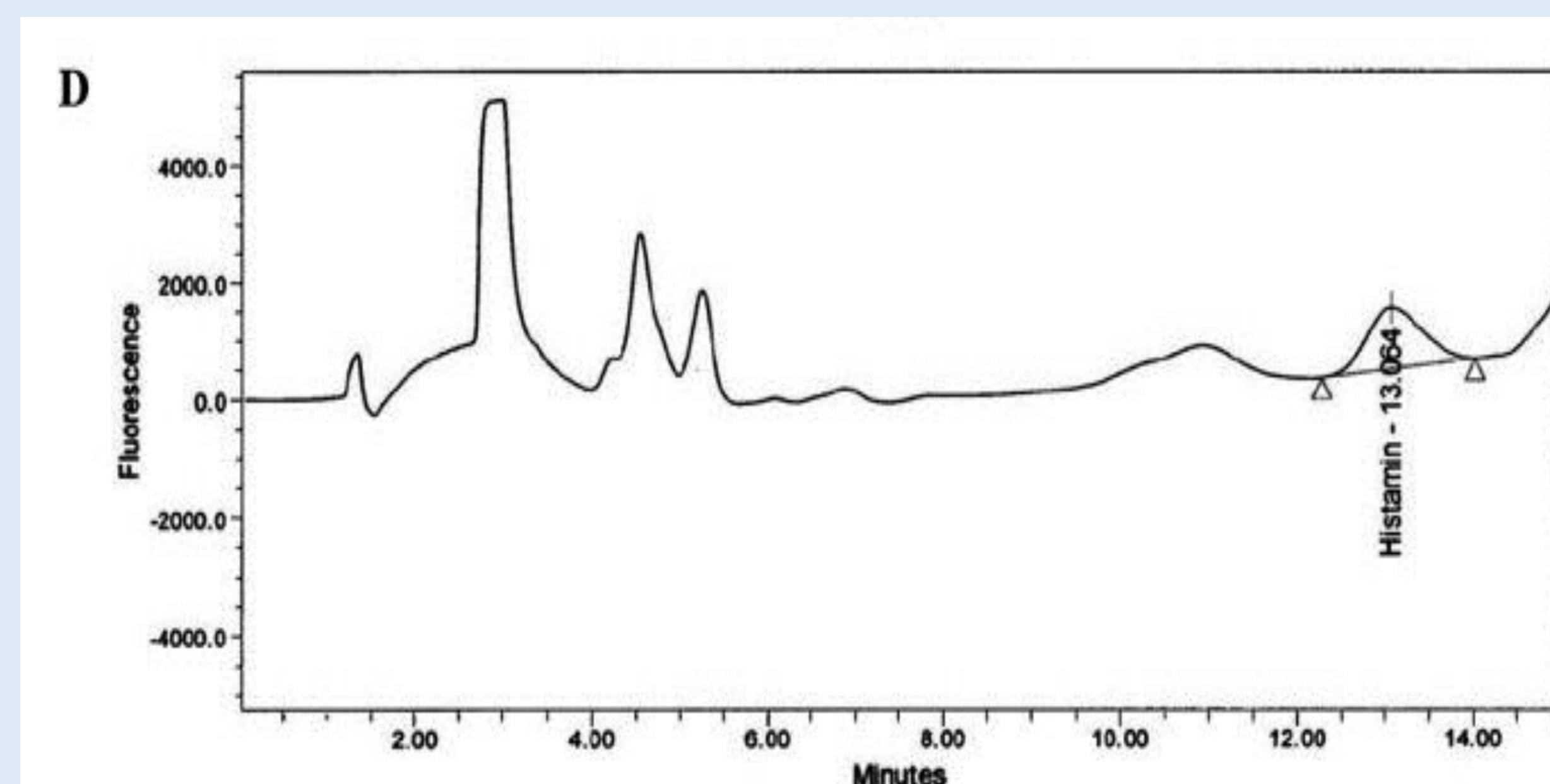
**2,3 & 4 DEFINICIONS AMINES BIÒGENES:** Toxics in high concentration but desirable in the physiology of mammals. Tolerance and immune response variable by genetics, hormonal changes, diet or medication. The occurrence of pathology happen by the accumulation of BA with an imbalance in relation to the ability of this degradation.

## 5. CHROMATOGRAPHICS DETERMINATIONS



PHYSIOLOGIC FUNCTIONS:	REGULATORY ENZYMES:	ACUMULATION DUE TO:	IT CAUSES:
Neurotransmission mediated inflammatory response	DAO diamine oxidase extra cell medium Deamination	Food (fermented, meats, fish, fruits, vegetables, nuts, chocolate, alcohol)	Vasodilatation, mucus secretion, tachycardia, arrhythmias, stimulates gastric acid secretion
Modifies the permeability of blood capillaries	HNMT histamine-N-methyl transferase the function is made inside de cell	Intrinsic production (depending of the personal immune system)	hematopoiesis, wound healing, day-night dysrhythmia
Modifies acidification in stomach	Methylation the ring of His	Reduced metabolization capacity	
Regulates muscle contraction			
Related with the SNC function (concentration)			

Derivatation compounds	Methods	Elution	Detection
Dansyl chloride	HPLC	Isocratic	Fluorescence
Benzoyl chloride	LC	Gradient	UV MS/MS
o-phthalaldehyde	CE		Amperometric detection



This figure shows a representative chromatogram of a sample spiked with 100 mg/kg of histamine. Quantification was based on the comparison of the analyte peak areas versus an externally generated calibration

**6. CONCLUSIONS:** Overall the objective of the work was achieved which was reflected by an overview of the mechanisms of action of BA (particularly histamine), saying nutritional aspects, physiological and the analytical methods of this group of molecules contained in the widely food diaries, that are accumulating in the body and contributing to the health diesis. The determination of BA in fresh and processed foods is interesting not only because of its toxicity, but also because it can be a useful index of deterioration, so it is important to monitor the levels of biogenic amines and keep improving the analyze

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