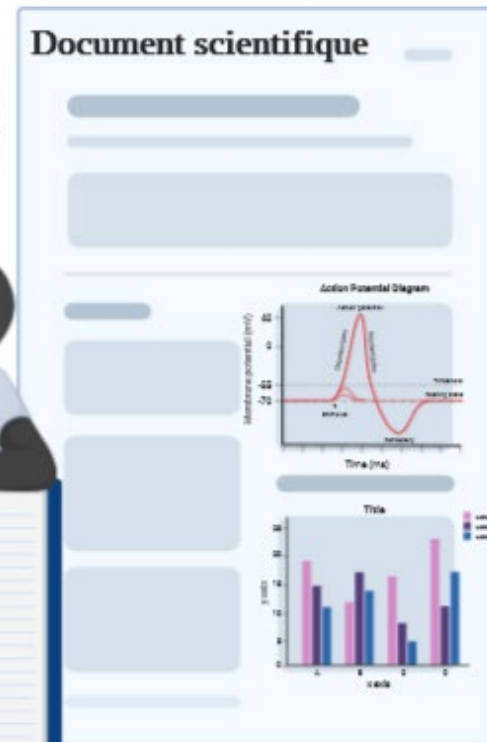
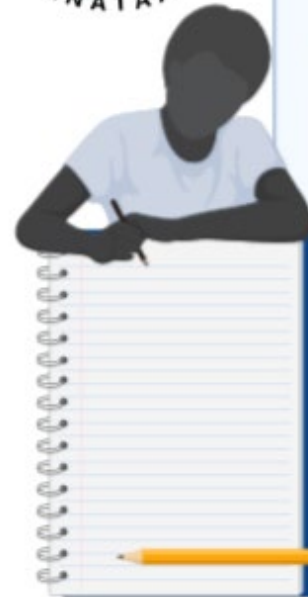




# Course of Written and Oral Expressions



# Scientific writing according to the IMRAD plan

Scientific writing requires strict adherence to the rules. The main challenge lies in being able to gather large and complex information into a clear text, following a well-defined structure. This type of writing differs from literary writing.

# Types of scientific documents: examples:

- Conference proceedings: [http://www.samidz.com/pdf/recueil\\_des\\_abstracts.pdf](http://www.samidz.com/pdf/recueil_des_abstracts.pdf)
- Scientific journal article: <https://www.asjp.cerist.dz/en/downArticle/8/4/2/1789>
- Book/Book chapter: <https://www.dunod.com/sciences-techniques/toute-biochimie-0>
- Conference poster: [https://www.n.chiba-u.jp/nglobe/images/blog/20190824\\_3.jpg](https://www.n.chiba-u.jp/nglobe/images/blog/20190824_3.jpg)
- Internship report: <http://archives.enap.ca/bibliotheques/2013/05/030425613.pdf>
- Compte rendu: <https://fac.umc.edu.dz/snv/faculte/microbio/2019/Tp%20%20Microbiologie%20Alimentaire%20%20L3%20Microbiologie.pdf>
- Thesis: [http://rdoc.univsba.dz/bitstream/123456789/2115/1/D\\_Sbio\\_ABBES\\_Mohamed\\_Abdelhaq.pdf](http://rdoc.univsba.dz/bitstream/123456789/2115/1/D_Sbio_ABBES_Mohamed_Abdelhaq.pdf)
- Dissertation: <http://dspace.univ-tlemcen.dz/bitstream/112/10273/1/allaitement-maternel-exclusif-a-6mois.pdf>

The IMRAD methodology is a commonly used blueprint for writing scientific papers, It allows the different parts of the document to be structured in a logical and clear way, so that the research results are presented in an understandable and convincing way.

The IMRAD plan includes:

- 1.Introduction
- 2.Méthodes
- 3.Résultats
- 4.Discussion

# INTRODUCTION

The introduction should answer the question of "why did I do this work?"

- Must engage the reader
- Must make the reader want to continue
- Part 1 presents the general aspect of the problem
- Part 2 asks the particular aspect of the question
- Part 3 announces the purpose of the work

# Sample Introduction

[Cardiovascular disease is now the leading cause of death in developed countries (Murray & Lopez, 1997), and in most developing countries. One of the most important cardiovascular risk factors is High Blood Pressure (hypertension) which is a major and frequent risk factor for many diseases (ischemic heart disease, stroke, heart failure, arterial disease of the lower limbs, end-stage renal disease, etc.). (Mancia et al., 2007).] **Problematic**

[According to the World Health Organization, high blood pressure is the deadliest cardiovascular risk factor (Blacher et al., 2005). It is a major public health problem in almost every region of the world.] **General Appearance**

[Algeria is no exception to this scourge (Fares, 2001). More than 10 million Algerians suffer from this silent disease, i.e. 26 to 35% of the population, according to studies carried out in the country (Kourta, 2009; SAHA, 2013).] **Special Appearance**

[The objective of this work is to estimate the prevalence of obesity and overweight among hypertensive patients in Tiaret.] **Objective**

# METHODOLOGY (MATERIALS AND METHODS)

This part answers the question "how did I work?"; It includes everything about the working method, and nothing but the working method. must describe:

- the specific population of the study
- what we are trying to assess
- the outcomes on which the evaluation was based
- The step-by-step course of the study The text:
- Must be written in the past tense
- Must not include results or comments



# RESULTS

This section should include the results of the study ("what did I observe?"). No comments are placed here. All analyses proposed in the "METHOD" section must result in results.

- Must be written in the past tense.
- Must follow a rational order.
- Figures and tables allow you to give the maximum amount of information in the least amount of space, in a concise and clear way.
- Numbers should be consistent.
- For the same information, you have to choose between a table or a figure.

# RESULTS

References to bibliographical references should not be found in this chapter. Comparisons with data from the literature are provided in the "Discussion" chapter.

# DISCUSSION

This is where the results are interpreted and the answer to the research question comes. It is important to express what you think personally, without using emotional expressions.

- Use the past tense
- Do not repeat what was said in the introduction
- No new results should be given

# DISCUSSION

The discussion can be segmented into several themes:

- 1- Say whether the objective set out in the introduction has been achieved
- 2- Identify and explain biases without excessive self-criticism
- 3- Compare the observed results with those of other studies

This last part is the longest; It can take up to half of the text in your work.

# CONCLUSION

In a few lines, recall what has been demonstrated and the important messages that flow from it. May express uncertainties. It is good to open up concrete perspectives. A piece of research rarely closes a topic, but usually opens up new avenues.

# Activity

Recompose the following text according to the IMRAD structure

## **Satisfaction of mothers regarding human milk donation**

H. Kadi, D. Lamireau , H. Bouncer , I. Madhkour , I. Madden , R. Enaud , L. Renesme , T. Lamireau

In France, human milk banks are in charge of the collection, analysis, processing, and distribution of human milk to neonatology centers for preterm infants. Knowledge of what motivates mothers to donate their milk could lead to better communication regarding human milk donation. A satisfaction survey was conducted among mothers who were donating their milk to a human milk bank. In total, 214 mothers answered a questionnaire in the presence of the collector during a home visit. The median age of the mothers was 31 years (18–46), mainly high school (19%) or university (65%) graduates, and the median duration of donation was 3 months (0.5–22). At the time of the study, the median age of infants was 3 months (0.5–25), and 88% of infants were exclusively breastfed. About three quarters of mothers were motivated by willingness to help others, a quarter of them being especially sensitive to premature neonatal care; 30% of mothers were motivated by having a high supply of milk. Around 25% of mothers were given information on human milk donation during pregnancy, and two thirds after delivery, mainly by the maternity ward midwives (53.4%) or by collectors during their visit (14.1%). Most mothers (72%) found the human milk donation process easy and most of them (92.5%) were willing to donate their milk again after their next pregnancy. This survey shows that more than 90% of mothers are satisfied with donation to human milk banks. However, efforts should be made to provide information on breastfeeding and human milk donation to the general population and health professionals.