5 Tips to help you reduce Stress

Stress is defined as a situation of excessive nervous tension, psychologically, a state of disruption caused by an attack.

Initially, stress was defined as a physiological response of the body to an exhausting, dangerous or distressing situation. The body then produces specific hormones. This notion was later extended to any state of disruption caused by a confrontation with danger, a physical or psychological threat, a difficult environment.

Here 5 tips to help you reduce your stress… in less than 5 minutes!

1. Analyse an image

Get a nice-looking image with several small details, which you can hang near your desk, for example. When you face a stressful situation, take 5 minutes to fix the image by spending several minutes contemplating the details it in an extremely precise way.

2. Guided relaxation (meditation)

Guided relaxation plays an important role to help you relax and relieve stress. For example, I recommend Gabrielle Bernstein guided meditation which offers a variety of small relaxation exercises of only 3 or 4 minutes.

3. Breathing

Breathing really influences stress and reduces its symptoms. By simply taking a few moments for a deep breath, you will be

able to calm down quickly. Make sure that you are in a quiet place, place one hand on your stomach and inhale deeply through your nose, slowly counting to four. Then exhale through your mouth, always counting to four. Feel the air entering your lungs, focus on the breath in your mouth.

4. Walking

Go out for 5 minutes to get some air. However, the exercise doesn’t stop there: you will have to walk quietly, paying attention to all the sensations that stimulate your senses, such as the heaviness of your steps, the wind on your face, the fabric of your gloves on your hands, the singing of birds or the small rocks on the sidewalk.

5. Visualization

Visualization can be used in all situations. In this case, you will most likely be able to reduce your stress level by visualizing a place, real or imaginary, in which you feel totally comfortable. The important thing is not necessarily to see images in your head, but rather to try to feel the sensation of relief and well-being that this place gives you. Do this visualization regularly, for 5 minutes, even in quiet moments. This will help the effects to be done more quickly when you feel the need.

Above all, don’t despair: it is really possible to overcome stress, by taking the time, changing certain habits and using the right tools, and being patient.

Read more: Tips to reduce the stress of a completing project

Tips to reduce the stress of a completing project

How to reduce the stress of a completing project that you have to execute efficiently and productively.

According to the Canadian Mental Health Association, work demands can cause physical and emotional stress with short- and long-term repercussions on a person's well-being. For example, long-distance driving, layoffs, accidents, tight deadlines, setbacks, punctual customers, absent teams, and budget cuts can make the workplace an increasingly stressful environment.

The ability to manage stress is a talent that is acquired through direct experience, in the immediate context of daily living, by learning about triggers and ways to deal with stressful situations, you can focus on the task at hand without feeling overwhelmed or compromising your health.

Here are some warning signs to watch for and some effective ways to combat stress at work.

Signs and symptoms of excessive work stress

- Anxiety, irritability, depression
- Apathy, loss of interest in work
- Sleep disorders
- Fatigue
- Difficulty concentrating
- Muscle tension, headaches
- Gastric problems

- Social withdrawal
- Loss of sexual desire
- Alcohol or drug abuse

What strategies should be adopted to limit stress related to a work project?

Task planning

Involve stakeholders before the project is launched, take their comments and opinions to understand their personal and professional constraints beforehand. Therefore, define a schedule/calendar accordingly in order to start your project management perfectly.

Communication

As we will keep reminding you over and over again, communication within a team is essential. Regular communication is essential. The project manager needs to know what his team is doing, and the teams need to understand what everyone is doing. Communicate at a good pace.

Roles defined for a manageable workload

Stress is often generated because of confusion about the roles and responsibilities that have not been clearly defined. Before the project is launched, clearly define the roles and responsibilities of each team member and limit everyone’s workload according to their abilities and skills. It is very important to remember that stress management is equal to the workload required.

Breaks between colleagues

Humour and jokes are a great way to dissipate tensions and build relationships between colleagues. A coffee break, off-site discussions lead to a pleasant atmosphere and create teams more motivated to achieve their objectives. As a result, these small intermittent breaks are not a waste of time, on the contrary, they improve the performance of the current project.

Individual meetings

Individual meetings are also very important in project management. They allow each team member to express their concerns and needs regarding the project. An excellent way for the project manager to clear up misunderstandings, understand everyone’s expectations and increase the positive growth of the project. Feeling listened to will encourage your teams to be motivated in their tasks.

In project management, it is important that your teams do not feel overworked, less stress for more productivity. Today, well-being at work is very beneficial for everyone, so maintain it!

Dietary supplements and functional foods

Food supplements are foodstuffs intended to supplement the normal diet, the constitute a concentrated source of nutrients or other substances having, alone or in combination, a nutritional or physiological effect. They are marketed in many forms (capsules, pastilles, tablets, powder packets or

ampoules).

The nutritional or health claims they claim have, since July 2007, been very strictly regulated under the European Regulation 1924/2006, which requires scientific proof to be provided to the European Medicines Agency (EMA).

Functional foods are not defined by legislation. They are considered common foods intended for consumption as part of a balanced and varied diet. Their particularity lies in the fact that they contain biologically active compounds that have beneficial effects on one or more target functions of the body, beyond the basic nutritional effects, in order to improve health and well-being and/or reduce the risk of disease.

Dairy products, especially yogurts, are the most abundant probiotic foods, with Danone’s Activia® and Actimel® products leading the way.

Like many foods, functional foods and probiotics are subject to safety and labeling rules, in particular with regard to claims used by the food industry as a selling point.

Recently, new guidelines have tightened the regulations around these probiotic foods because their health benefits were difficult to recognize.

European Union Regulation No 432-2012 of 16 May 2012 establishes a list of authorized health claims on foods and specifies that health claims must be based on generally accepted scientific evidence.

Probiotics fall into two types of claims: function claims and therapeutic claims:

Claim Any representation that states, suggests or implies that a food has particulate qualities related to its origin, nutritional properties, nature, processing, composition or any

other quality.

Health claim refers to any representation in labeling and advertising that states, suggests or implies that there is a relationship between the consumption of a food or food constituent and a person's health.

Functional claim refers to a health claim that describes the physiological effects of food or food constituents on the body's normal functions or biological activities associated with health or performance. Functional claims can be made about the physiological effects of probiotic microorganisms in foods (e.g., "promotes regularity" and "improves nutrient absorption and aids digestion"). Function claims must include a specific, scientifically substantiated physiological effect associated with good health or performance and providing useful information to consumers.

Therapeutic claim refers to the treatment or mitigation of a disease or health disorder or related to the recovery, correction or modification of bodily functions. For example,"[name of food or food constituent] lowers blood cholesterol".

The assessment of probiotics for food use is described in the report of the Joint FAO/WHO Expert Consultation (Food and Agriculture Organization of the United Nations and World Health Organization).

Specific labeling guidelines are outlined in the Canadian Food Inspection Agency's (CFIA) Guide to Food Labelling and Advertising, which applies to all products containing probiotic microorganisms. According to the appropriate description of a probiotic product, as indicated on the label, should include the following points:

- *Strain Identification*: Any claim for a probiotic must be accompanied by the Latin name of the microorganism (i.e. genus and species), as well as the name of the strain of

the microorganism. For consistency, it is recommended that the strain should be identified by the number assigned by an internationally recognized culture bank, such as the American Type Culture Collection.

- *Quantity declaration*: The quantity of the probiotic microorganism(s) present in the product must be indicated in colony-forming units (CFU) in a specified portion of the food. This statement must appear next to the Nutrition Facts table or ingredient list, or in close proximity to the claim.
- *List of ingredients*: Any food containing probiotic microorganism(s) must display a list of ingredients in accordance with the sections of the Food Regulations. The probiotic microorganism must be designated by its common name or by the class name.

Probiotics for Histamine Intolerance

Histamine intolerance, sometimes referred to as *histaminosis*, is an over-accumulation of histamine in the body's organs. Histamine intolerance is often referred to informally as an allergy, but due to a metabolic imbalance, this intolerance is technically caused by the progressive accumulation of extracellular histamine.

Around 1 percent of the world population is intolerant to histamine; of those, 80 percent are middle-aged.

Histamine is an organic nitrogenous substance involved in local immune responses, it controls as a neurotransmitter the physiological activity of the gut, and various functions in different organs such as the brain, the spinal cord, and the

uterus. Histamine is also involved in the inflammatory response and, as a mediator of itching, it plays a central role.

Symptoms of Histamine intolerance

Histamine intolerance may look like any seasonal allergies-you can experience hives, itchy or irritated skin, red eyes, facial swelling, nasal congestion, headaches, or asthma attacks if you consume histamine-rich food or beverages. Other signs, including a decrease in blood pressure, heart palpitations, and anxiety or panic attacks, could appear and could be sometimes more severe.

Gastrointestinal problems are also particularly common: recent research surveyed about 60 patients on the subject and confirmed that the most common and extreme symptom was bloating, accompanied by diarrhea, abdominal pain, and constipation.

Such symptoms are believed to be common amongst all patients. The reason is that histamine receptors are present all over the body, . Campbell adds that, since the symptoms are quite unpredictable, patients are usually sent to multiple consultants.

Histamine intolerance is generally related to other diseases such as allergy or food intolerance, mastocytosis (a rare disorder in which mastic cells accumulate in the skin or organs), psychosomatic diseases (physical manifestations of stress and anxiety), anorexia nervosa, or adverse drug reactions because of this bounce-around, research from Comenius University in Bratislava says.

Probiotics for Histamine

intolerance

Over 100 trillion bacteria housed in our organism are actually participating in every single metabolic process in some way, spanning from immune health to everyday mood and energy.

When trying to understand the importance of gut bacteria in some illnesses, disorders like histamine intolerance are no exception.

Bacteria are actively involved both in histamine synthesis and degradation.

Some types of bacteria inside the gut will turn an amino acid called histidine into histamine when we eat foods containing this semi-essential amino acid. This conversion raises the levels of internal histamine-even though the food itself is not considered rich in histamine.

There may be an accumulation of extra histamine in the certain patient’s body experiencing histamine intolerance; and an imbalance of the gut bacteria may be the cause of a persistent rise in internal histamine levels.

Many people immediately turn to probiotics for histamine intolerance in an attempt to rebuild and restore gut bacterial equilibrium. Numerous studies have shown that probiotics can boost colonies of gut bacteria and improve overall health. So, this is a perfect solution in general.

Probiotics for histamine intolerance (Some Strains to Look For)

- Bifidobacterium *infantis*
- Lactobacillus *gasseri*
- Bifidobacterium *breve*

- Bifidobacterium *bifidum*
- Lactobacillus *salivarius*
- Lactobacillus *rhamnosus* (especially GG)
- Bifidobacterium *longum*
- Bifidobacterium *lactis*

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Strategic Management & Leadership Analysis in a Pharmaceutical Company

SAIDAL SARL Group is a pharmaceutical manufacturer in Algeria which has a history of more than 30 years. But after 2010 the company has faced financial crisis slowly which brought it to the level of bankruptcy. This was a gradual change and at a glance, it can be identified that if closely monitored the

disaster would have been controlled. Now that it has happened, it needed to implement a strategical plan to set SAIDAL in a new direction to get its body back on track with a greater goal to achieve more.

Recent studies have shown that the main reasons for the disaster are: the inappropriate resource allocation or investments, lack of monitoring of finances, structural errors of the newly appointed top management in 2010, also strategic decisions, errors in the value chain, etc. These were obtained by the external and internal environment analysis.

The aim of this work is above all to formulate a new business strategy R&D-open-innovation-oriented and focused on biotechnology to face challenges affecting the company's global performance. Through critical analysis, I'll try to highlight the relationships that might exist between this strategy, stakeholder expectations and the organizational effectiveness, and thus elaborate based on other similar and successful business models a reasonable implementation plan for the real-world environment that would make such a transition possible.

Introduction

What is SAIDAL Group?

SAIDAL Group is a pharmaceutical company in Algeria currently with a Capital of 2.5 Billion Dinars. 80 percent of SAIDAL Group's capital is owned by the state and the remaining 20 percent were sold to institutional investors and individuals in 1999. The restructuring process in 1997 contributed to its development into a manufacturing company with three divisions (Pharmaceutical, Antibiotics, and Biotech).

Mission

- Ensure strategic stability and profitability in safeguarding its financial flexibility, maintaining constant development of its goods ‘ quality, attaining its growth targets and improving its human capital.
- Achieve the State’s defined goals as the primary owner/shareholder.

Why SAIDAL Group?

SAIDAL group is a company with a greater history in the pharmaceutical industry of Algeria as well in the international context. From its starting in the year 1985 up until around 2010 it performed well, but now the company is in a phase of declining where the strategic decline has commenced due to several reasons. Therefore, for the assignment this organization becomes an ideal candidate and in the next chapters’ evaluation of the current strategic position of the company will be analyzed along with the pros and cons that will give out good understanding where the company will be heading. Next, strategic suggestions and a fully pledged plan will be presented.

Current Strategic Position of the Company

SAIDAL Group was performing well in the initial stages prior to 2010 before the restructure was introduced. In the year 2017, the company revenue was only estimated at 84 USD Million and that was not enough to cover their investment made from the year 2010 150 USD million per annum. Therefore, by the year 2017 SAIDAL group is at a level of bankruptcy. At that moment the company had 2357 employees on board (SARL, 2017).

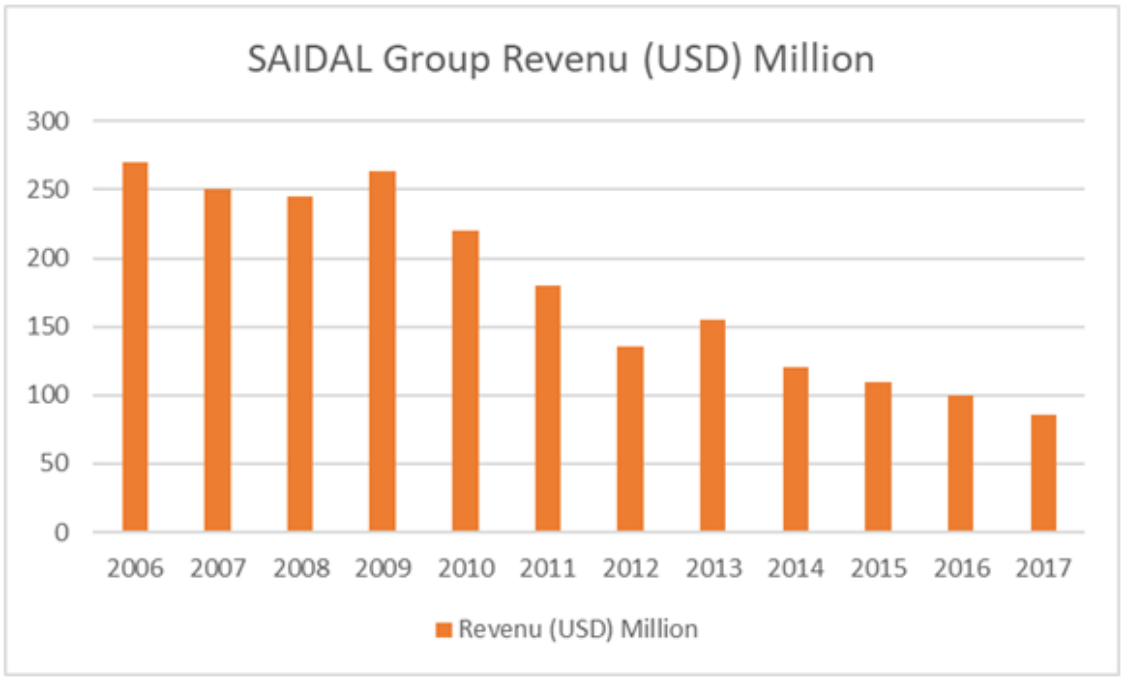


Figure 2- SAIDAL Group Revenue 2006 – 2017

The concept of a firm in difficulty has only recently been introduced. Although this term has taken over from the traditional term "bankruptcy", the two terms are not superimposable and do not in any way reflect the same legal approach. A firm goes through several stages before reaching the irremediable stage of bankruptcy.

A failure is first and foremost an economic event since it is the result of the company's economic and financial

difficulties. However, it is also a legal event, given the importance of the law in initiating recovery measures. Thus, it seems appropriate to devote a part of the present work to the legal framework of the Algerian company in difficulty.

SAIDAL group was performing well in the earlier stage but the turning point of this kind of bankruptcy occurred at the point of changes that were introduced in the year 2010 by the change of the top management.

SAIDL was it running smoothly?

The concept of a firm in difficulty presupposes that the firm has ceased to operate smoothly. A break in the continuity of its operations has occurred, will occur or is likely to occur. Similarly, SAIDAL was operating much smoothly prior to 2010 as the company was having three subsidiaries to operate separately in the pharma sector, antibiotic sector and biotic sector. During that time, their operation was much successful and the sales were growing rapidly with each year 1.23% increase in acquiring the international market especially in the South Asian region which was a much difficult entry for the other competitors. At the beginning of the year, 2017 firm was therefore not yet in a state of cessation of payments, characterized by the impossibility of meeting current liabilities out of available assets.

Jean Brilman adopts a fairly broad concept of a company in difficulty: “it is not only a company that is in financial difficulty (the immediate consequence of other, much deeper problems), it is also a company that, encountering or anticipating difficulties, takes immediate action to avoid financial problems: little or no profitability, difficult economic conditions, declining business volume, deterioration in the social climate, conflicts, etc.” (Brilman, 1978). Similar is what happened for SAIDAL at the initial stages there financial states were at a greater level as they had a

lot of financial reserves stored from the earlier profit. Their liquidity ratios were at a greater level with a value of more than one (SARL, 2017).

Beyond that, the notion of a company in difficulty does not necessarily refer to the idea of financial difficulties but reflects a different approach to the operating incidents that companies may encounter. Indeed, it incorporates an essential idea: prevention. SAIDAL management understood the situation by the year 2015 and took action to fix the issue but the prevention was not done. Actually what lacked in risk management. Therefore we can conclude that SAIDAL SARL was running very well and had a greater throwback due to some reason, that is what needed to be analyzed using this report.

The failure process of SAIDAL Group

Figure 3 – Failure process in a nutshell

As per (James Kolari, 2002) failure process of a large organization happens first in terms of economic, commercial and then followed by financial decline. SAIDAL group is an ideal example for such a consecutive failure or bankruptcy in their domain and the saddest part it while all of this process is happening none of the top management noticed any of these or no action was taken to fix this. Following are the details of the step by step financial failure of SAIDAL group according to their report (SAIDAL SARL, 2017).

Economic regression

The company’s performance is based on three factors which are: production cost, quantities sold and prices. Each of these factors is subject to the constraints of environmental variations. Depending on the nature of its activity and its situation in its environment, the company’s performance is more or less sensitive to some events: increase in the prices of raw materials, wage increases, competition, technological innovation.

Table 1- The most important investments in the pharmaceutical sector in Algeria (Ghebbi, 2010)

Company	Country	Investment in USD	Rank
Sanofi-Aventis	France	320 Million	#1
Hikma Pharma	Jordan	165 Million	#2
Saidal	Algeria	149 Million	#3
GSK	United Kingdom	142 Million	#4
Novartis	Switzerland	129 Million	#5
Pfizer	United States	111 Million	#6
Novo Nordisk	Denmark	85 Million	#7
MSD	United States	85 Million	#8
Roche diagnostics	France	85 Million	#9

The new management program was appointed in the year 2010, established with the aim of expanding the business at SAIDAL. The directorial board took some kind of regressive investment decisions to work in line with the other competitors in the industry and come ahead of the competition.

- Increasing investment to establish a new factory with USD 100 million

- Increased Research and development investment up to 40 USD million from 20 USD million which was the earlier

While all of that investment was increased there was an increase in the mineral prices where the materials needed for pharmaceutical manufacture like Rutile, Zincite, Periclase, Hematite, etc were increased in price due to new tax revisions. Therefore the economic regression began for the SAIDAL.

Table 2 – SAIDAL R & D Expediture Chnage – 2001 -2008

Indicator	2001	2008
Workforce by category . Executives . Supervisors . Agents	 1103 1371 938	 1883 2004 583
% of employees in R&D	4,86%	6%
Average monthly gross pay per employee, DA	32,000 DA	57,000 DA
% of trained employees in one year	40.41%	39.71%
% Training expenses	0.59%	0.39%
Training budget/Wage bill %	2.36%	1.47%
Average training expenditure per trained employee, DA	22,480 DA	25,352 DA
Number of accidents at work weighted by severity rate	20.8	12
Source: academia.edu		

Commercial decline

It may be abrupt, gradual or latent and concealed. It is characterized by a fall in sales or a drop in the gross margin rate, or both successively or simultaneously. Due to the above-mentioned reasons, the cost of production increased at SAIDAL making the average margin per pharmaceutical, biotic, and antibiotic to decline up to 17%, 19%, 15% respectively. Earlier these values were 38%, 43%, 32%. That became a huge drop for the company and gradually up until 2017 these values have dropped gradually. As the sales volume increased a little there was a remarkable revenue but that was not enough to cover the cost of the sales and the investment.

Financial decline

If the company does not react, is not flexible and cannot find new markets, while reducing its structural costs, then a financial decline might begin. It is most often the consequence of an uncontrolled commercial decline. The insufficient margin no longer allows the company to cover its structural costs (Senturk, et al., 2006). Similarly, SAIDAL lost the margin making the path to loss of markets and the works part is that there their investments has gone wrong making company much more susceptible for the bankruptcy. By the year of 2017, their liquidity has gone down, having a very low quick ratio in terms of finance and the top line bottom both growths has declined.

Strategic Management

According to Alfred Chandler, a strategy is an act of determining the fundamental long-term goals and objectives, putting in place the actions and allocating the necessary resources to achieve those goals (Chandler, 1990). Prior to developing a strategy, we should find out where an organization lies now and what are the factors that will affect the current status and successful strategic management

in managing these factors effectively and efficiently to gain competitive advantage and bottom-line growth.

Strategic Management Process

The strategic management process consists of five main steps: 1) Initial analysis (understanding the strategic context) 2) Internal and external analysis (planning the strategic approach, analyzing environment, resources, identifying opportunities, threats, strengths, and weaknesses) 3) Formulation of the business strategy (developing a strategy) 4) Implementation 5) Evaluation of the results (Figure 1).

Figure 4. Business Strategy Framework

Strategic management is a continuous and systematic process during which the company's leaders make decisions that will have consequences in the future, develop plans and programs to implement the decisions and achieve the set objectives, and finally, evaluate performance. It is also a unique opportunity to unite management, employees and various stakeholders as well as customers in a common reflection to understand where

is the company and where it wants to go (Nag, et al., 2007).

Throughout the strategic management process, the company must focus on the needs (expressed and experienced) and expectations (expressed and unexpressed) of customers (current and future) and stakeholders (suppliers, human resources, management, partners, shareholders) in order to offer them satisfactory products and services meeting their needs and expectations (Riege, 2005).

Environmental Analysis of SAIDAL Group

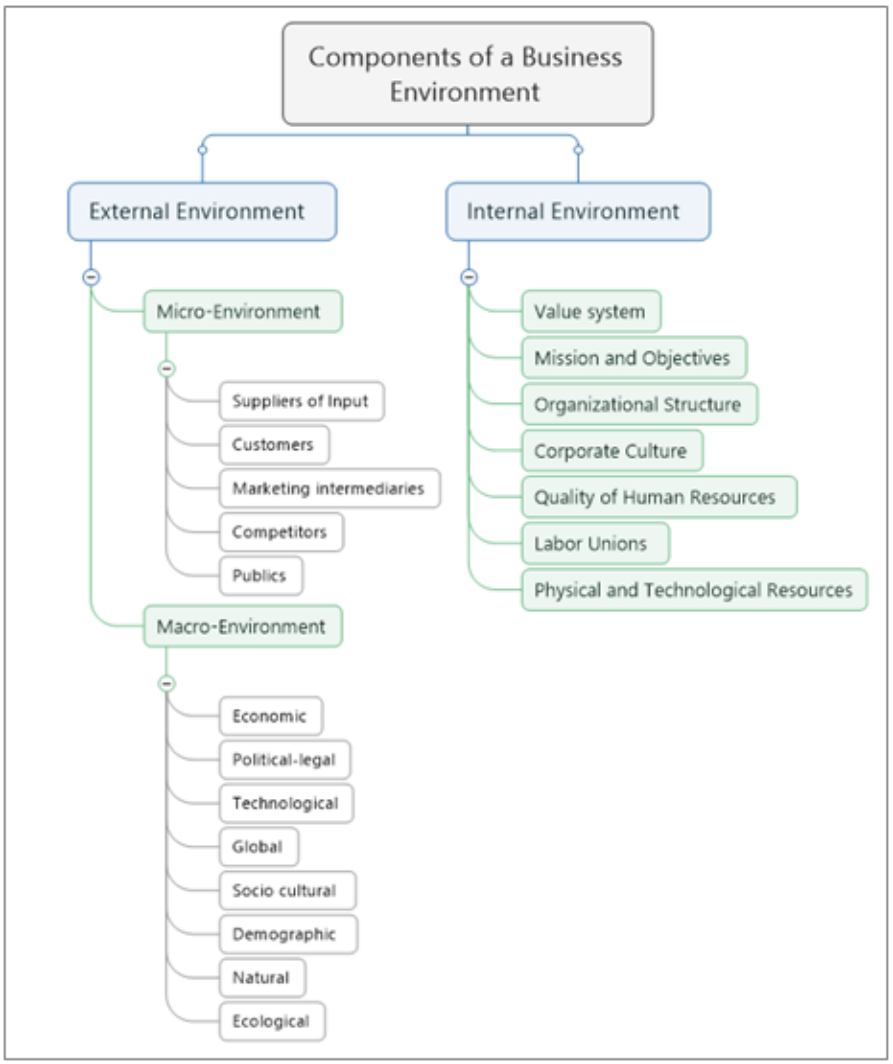


Figure 5. The Components of a Business Environment

The survival of the company is directly linked to its dependence on external actors. The importance of the company's

external environment can be understood here in terms of the extent to which it has developed a certain degree of dependency on its environment.

Macro Environment

A company’s analysis of the environment has a twofold objective:

- to evaluate the various elements that may affect its activity;
- to identify environmental opportunities or threats;
- to identify external factors over which the company has no control and which also influences its orientation.

We must therefore briefly analyze the external environmental factors (micro) that have or could have an influence on the company’s growth and profitability prospects as well as on its situation in the market. The analysis of the external environment will lead to identifying external market opportunities as well as external threats that could affect the company’s operations in the short, medium or long term.

PESTLE Analysis of SAIDAL Group

In business strategy, the PESTLE analysis (political, economic, sociological, technological, environmental and legal) is a model for identifying the influence (negative/positive) that macro-environmental factors can exert on a company (Holland, et al., 2004). However, the PESTEL or PESTLE analysis is not a reference, but a mnemonic tool that makes it possible to carry out an external analysis more simply and thus be able to produce a SWOT matrix.

SAIDAL and its competitors are generally companies that are not really known and established in a specific field that is difficult to grasp, partly because of the complexity of the products manufactured and sold and partly because of their equally difficult environment.

Policy

A company like SAIDAL is present in multiple countries and is also active in a market that is facing both globalization and health issues.

Thus, in addition to having to deal with the political environments of trade and tax laws, SAIDAL must also comply with the social protection requirements of the countries it serves.

Economic

The growth rate is gradually picking up again in most countries in the world, even if it remains insignificant (in Algeria, it is around 1.5% according to World Bank (WorldBank, 2019)). On the other hand, developing countries are an increasingly important target for any market, and even more so for pharmaceutical companies.

Socio-cultural

In Algeria, as in other countries, the consumption of medicines is an increasingly important part of health care expenditure and weighs heavily on health insurance, household, and state funds. This growth is the result of several factors and particularly of the socio-cultural transition that has characterized the Algerian society in recent years (Farida & Brahim, 2012).

Technological

Technology is the source of business power. In order to control the local pharmaceutical market, SAIDAL uses the latest technology, its control over the sources of supply of raw materials and intermediate products and over marketing networks, its management machine, its easy access to financial markets, etc. However, the industrial capacity of its subsidiaries operating outside the country is oriented towards products that consume imported pharmaceutical substances at

prices that are often abusive.

Ecological

This is one of the black spots: the company being in the ecological trend, the synthetic drug has a bad image, in addition to coming from production lines mixing non-renewable elements such as solvents, or organic waste.

Legal

Fortunately, the pharmaceutical market is closely monitored in many aspects. SAIDAL’s business is significantly affected by patents, drugs, and their respective marketing authorizations, either under medical prescription or over-the-counter. It is one of the most challenging environments in which to operate, without a doubt.

Also, the newly introduced tax system for the pharmaceutical raw materials has become much of a burden for the industry.

Porters Five Forces Analysis of SAIDAL Group

Porter’s Five forces is a model that defines and analyzes five strategic powers affecting any market and helping to identify the vulnerabilities and strengths of a business. The study of the Five Forces is also used to describe the function of a market when deciding on business strategy. When it comes to strategic position determination of an organization like SAIDAL this step is very crucial to get an understanding of the current pharmaceutical industry status in Algeria.

Bargaining power of the buyers

The bargaining power of the buyers is very high as the number of patients, doctors and hospitals is very high throughout Algeria and also in the international context. Other than that the switching cost from one brand to another is very low in this industry in the majority of the drug types. It can be concluded that the bargaining power in this industry is very high.

Bargaining power of the suppliers

The bargaining power of the suppliers is very low in this context and that happens as there is much more possibility for the import of raw material rather than sourcing locally. But the same thing caused the decline of SAIDAL due to tax changes.

Threat of substitutes

This is very low in this industry as most of the products are generic items and the only limited number of alternative treatments available such as implants, surgery, homeopathic therapies, etc.

Risk of new entrants

There is a long lead time involved in the research and development in this industry, thing SAIDAL SARL has successfully completed years ago, other than that need of distribution channels, marketing teams, patent portfolio databases along with higher investment make new entrants a nightmare to this industry.

Rivalry among established firms

There are more than 20 players registered in this industry of Algeria which is considered as large scale / commercial pharmaceutical producers. Therefore the price competition is so much along with the new product introduction which makes the company with the highest technological Research & Development teams win. Also one of the major rules in this industry is the ‘first to market’ rule that makes a company succeed as well as decline fast.

So it is evident that SAIDAL group has taken above strategic decisions by identifying how the market works but the problem is that they didn’t identify the other factors and the internal environment of the business.

Micro Environment

SWOT Analysis of SAIDAL Group

Table 3- SWOT Analysis of SAIDAL Group

Strengths	Weaknesses	Opportunities	Threats
Market leader in the latest generation of antibiotics Sales Increase Financial stability (lexpressiondz.com, 2017)	Decrease in R&D Higher employee turnover (lower retentions)	Increase in health issues Rising population and living standards The exponential growth of products on the biopharmaceutical market (vaccines, biotechnologies, etc.) International possibilities in the Asian region	Generic drugs Complex and rigorous regulations related to drug registration Increase in counterfeiting The government revised the tax system

The strategic management key is to converts threats and weaknesses of the SAIDAL Group into opportunities in order to get out of the level of bankruptcy.

Business Strategy

Strategic Objectives

The following objectives were set in order to get out of the current financial situation by taking the strategic planning duration to be five years. Findings from the internal and external analysis have been used for the formulation,

- Increase the profit margin of every product type to be more than 30% by adapting an operational optimization process by the year 2022
- Reach the net profit of 400 USD million by the year 2022
- Increase the efficiency of the R & D division by innovation-based techniques with the aim of giving out minimum new product per year
- Increase the local market share to 40 % by the year 2022 (currently 16% market share)
- International market acquisition in terms of 20% total sales acquisition by the end of the year 2022

A Research and Development strategy (Functional Strategy) to Face the Current challenges

SAIDAL group, as well as the others in the pharmaceutical industry traditionally intensively based on R&D, has gone through a series of institutional and technological “shocks”. However, the core leadership of the respective department has remained sufficiently small and stable over a long period of time.

Industrial dynamics in the pharmaceutical industry are intimately linked to three specific key factors:

The nature of drug discovery processes, otherwise the properties of the technological opportunity space and the research procedures by which firms explore this space.

The fragmented nature of the relevant markets where research activities are relatively limited. Specifically, innovation processes are characterized by a long period of time during which the cumulative dimension is quite small and by “quasi-random” research procedures (random screening). Thus, innovation in one market (or therapeutic class) does not induce a greater probability of success in another market.

The type of competition and the role of patents. The pharmaceutical field is representative of those sectors where patent applications or models reasonably affect the competitive process.

Therefore, the major task for achieving the strategical success of the SAIDAL group depends on the hands of the research and development team and therefore this strategic plan mainly focuses on creating R&D stronger to gain the above mentioned SMART strategic objectives.

Biotechnology, a strategic field to exploit

The future of the pharmaceutical industry is thus taking on a new face, that of the "multi-buster" model, manufacturing specialty products, more oriented towards personalized medicine focused on small populations. The first discoveries on the human genome have given new directions to pharmaceutical R&D. As a result, nearly half of the new treatments launched on the market since 2003 are derived from biotechnology (Bertrand, 2000).

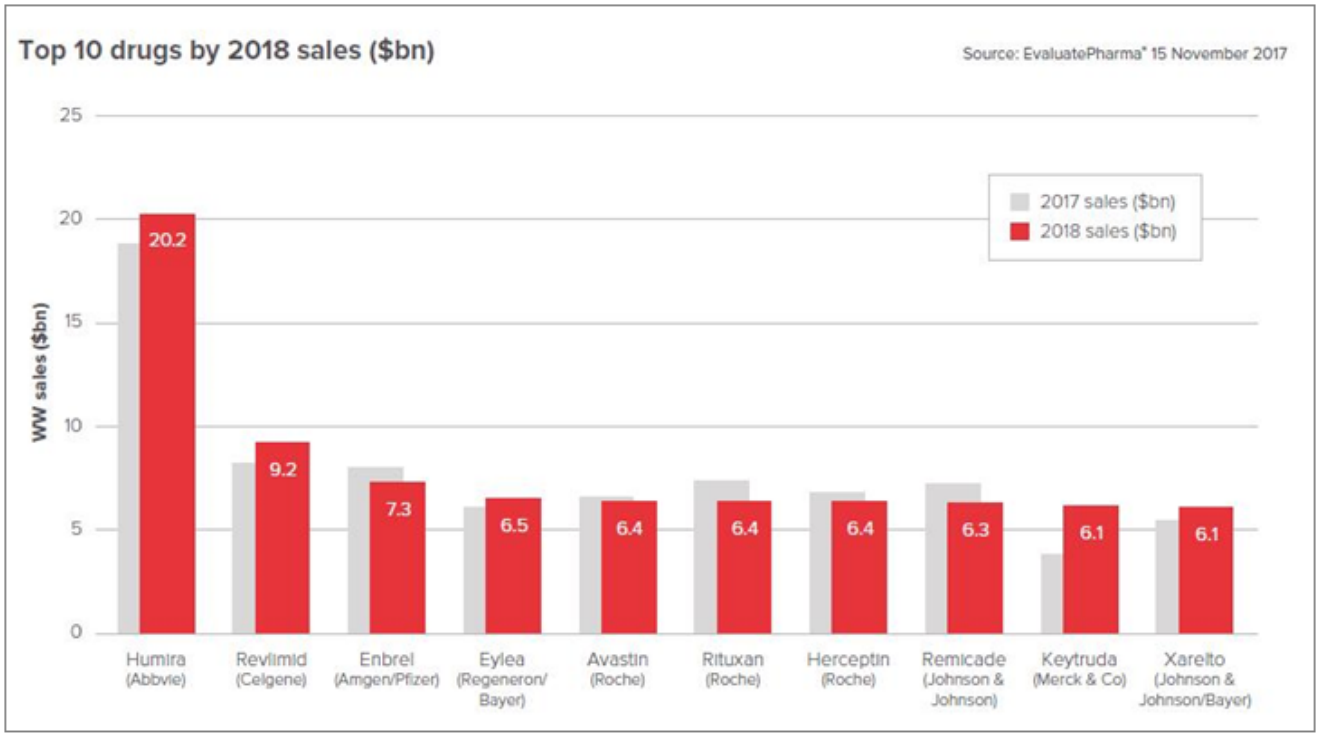


Figure 6- Top 10 drug sales by Evaluate Pharma

This chart from a report of Evaluate Pharma, one of the top 10 pharmaceutical producers in the United States shows that the top 10 drugs by sales are all biotech products, in red sales in 2018, and the shadow in grey represents the sales in 2017.

Therefore the SAIDAL group has a greater opportunity to enter into biotech products which will be the greater solution for their financial crisis as when biotechnology is involved, the cost of production as well the demand rises up.

The strategic choice of open innovation in biotechnology

Biotechnology has created an unprecedented innovation crisis in the pharmaceutical industry. The skills required are more advanced and diversified, and competition is upstream. Due to employee turnover, many of the skilled employees has left the R&D division making a challenge for them to engage in innovation bases biotechnological pharmaceutical formation.

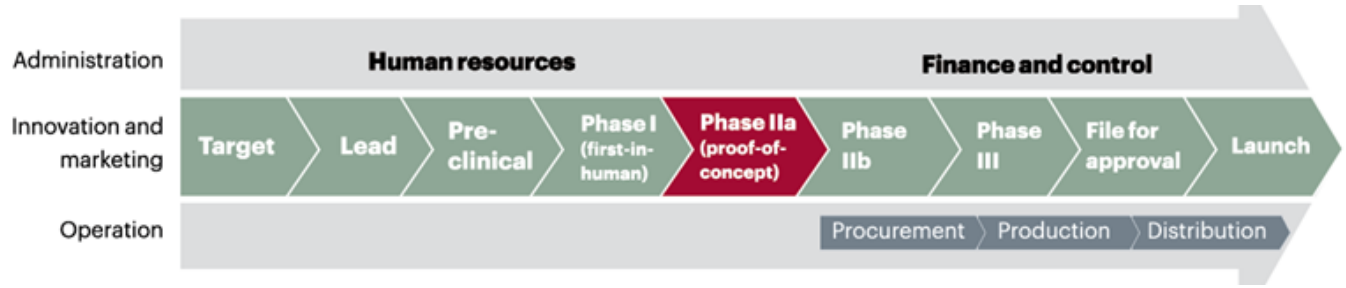
To stay in the race, the best option is to turn towards open innovation, through various practices: alliances with start-ups, research partnerships with peers and many more.

Competition is becoming more and more established upstream of the innovation process, making the need for an innovation cycle to be narrow or shorter so that it will keep SAIDAL in the loop. The competition takes place in the acquisition of scientific and technical knowledge, which is often present outside the company’s borders. Thus, even the most competent R&D organization needs to connect to external sources of knowledge in order to innovate. This is the theoretical concept of open innovation.

There are 26 universities within Algeria itself and among that there are 14 universities that have biotechnology facilities which make eventually the best hub for open innovation.

Redesigning the Value Chain

The traditional value chain of the SAIDAL Group is just straight forward and only involves very small parties and that makes loopholes which eventually lead to loss of revenue as well the inconsistencies in raw material acquisition.



Even though there are around 2300 employees in SAIDAL their distribution is therefore restricted mostly for procurement, production, and marketing which are the primary value chain components. But it needs to be incorporated also with other supporting activities. The modified value chain can be generated as follows:

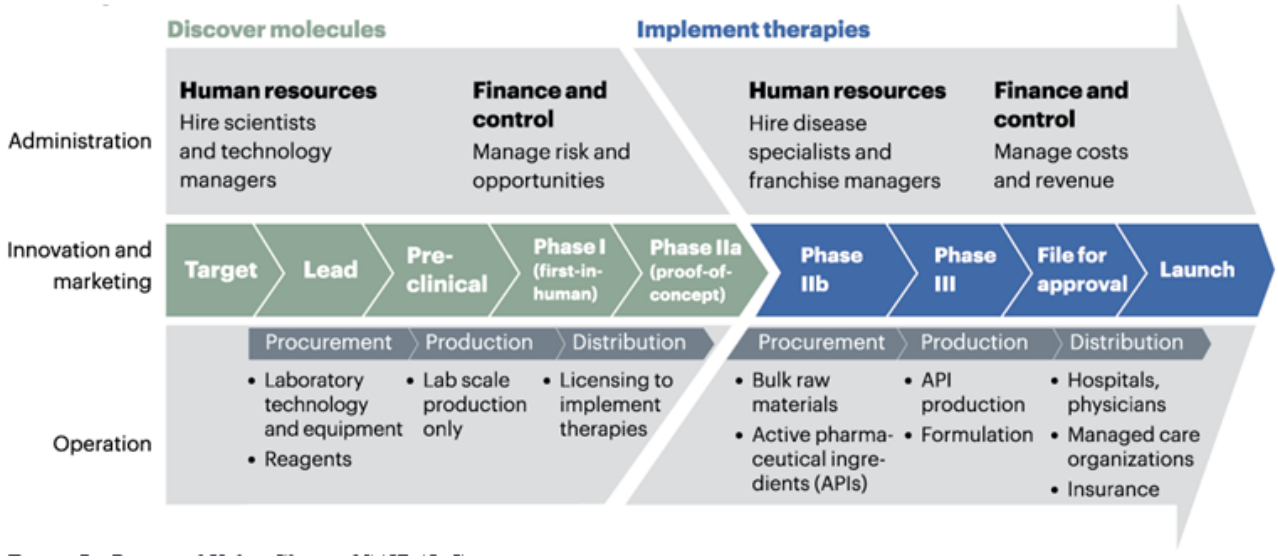


Figure 7 – Proposed Value Chain of SAIDAL Group

This will include a direct involvement of human resource division for the handling of the talent acquisition and monitoring of the R&D and other major divisions and also the involvement of the Finance and control division to handle all

of the financials Realtime allowing the use of resources effectively and efficiently.

The implementation plan

The creation of an implementation plan is structured along several axes that define the growth of the company. It is defined by the act of determining the fundamental long-term goals and objectives, implementing actions and allocating the resources needed to achieve those goals.

Gantt Chart of Implementation

Table 4 – SAIDAL Strategic Change Implementation Plan – Gantt

Task	2020	2021	2022	2023	2024
Structural change implementation	■	■	■		
R & D Division Redesign	■	■			
R & D Open Innovation		■	■	■	■
Sales / Marketing Force	■	■	■		
Value Chain Analysis	■				
Value chain modification		■	■	■	

4.1 Resources allocation

Human resources: The pooling of the brainpower of researchers from the ‘Inflammation and Immunology’ Division, they will be assigned to work in cooperation with the chosen startup on the biosimilar drug with collaborative research with selected 5 universities in Algeria

Physical and technological resources: The pooling of devices and all materials to conduct research and development in a cooperative context along with the reach of international

partnership with SAIDAL and the other giants in the western countries like USA and Germany.

Financial resources:

To establish the estimated cost of the project, a list the direct and indirect costs should be established:

Direct costs

- Salaries of internally mobilized human resources, according to the hours planned for them to work on the project;
- The cost of external human resources;
- The cost of purchasing and/or renting equipment, supplies, and materials (rooms, computers, software, building materials, tools…);
- Any travel expenses.

Indirect costs

- Overheads (or operating costs): these are all costs of the project other than labor and material costs, i.e. accommodation, heating, communication, external services, etc.;
- Management costs such as salaries for the company's transversal services (administration, marketing, finance, accounting, etc.).

Conflicts and Issues in Implementation

This process becomes a radical change that needs to be implemented quickly in order to take back SAIDAL to the prosperous age that it had earlier giving up bankruptcy. Therefore, some kind of theory like Kurt Lewin's Change Management needs to be adapted.

Kurt Lewin's Change Management Model use in SAIDAL

Kurt Lewin's change model has three steps that include

unfreezing, change and refreeze.

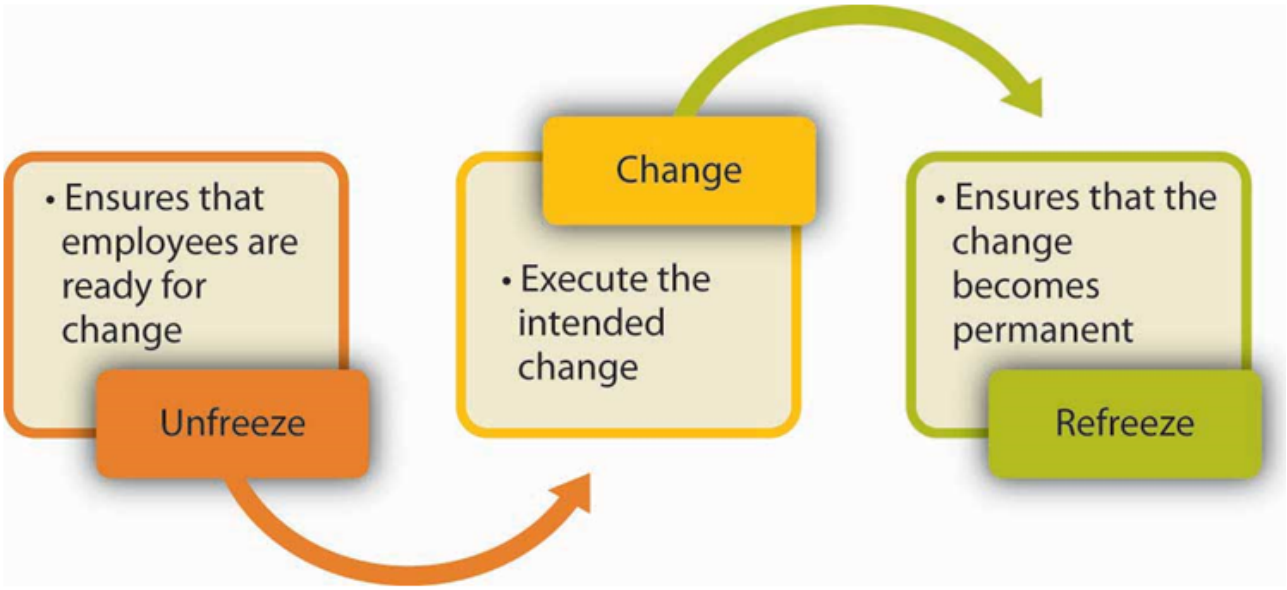


Figure 8- Kurt Lewin's Change Model

In the environment of SAIDAL this can be implemented in order to get the desired change, First, need to be done the unfreezing by first making the employees aware of what the situation that SAIDAL is currently in and why this change is needed. Then with the involvement of the top management itself, change can be introduced to the employees and they will embrace it willingly. Once the change is established it can be made to refreeze by providing some kind of incentives, bonuses, etc to them.

Projected Profit & Loss Account

Table 5- Projected Profit & Loss Account for SAIDAL Group 2020 – 2023

	USD Million			
	2020	2021	2022	2023
Income	450	640	850	1000
Cost of Sales	150	220	350	350
Gross Profit	300	420	500	650

Administration expenses	60	70	73	80
Marketing & Promotion	50	50	60	70
Other	(20)	(20)	(30)	(40)
	130	140	163	190
Net Profit	170	280	337	460

Conclusion

It can be concluded that SAIDAL group was a very well-established group that had fallen finically up to bankruptcy due to lack of monitoring of their process and also due to value chain changes and the investments that are done without considering other factors. These reasons were justified with the internal and external analysis conducted and can be concluded that the organization needs a strategic change. This change can be successfully implemented by doing a change to the structure of the company by paying more attention to the research and development department but with much monitoring of resource and fund allocation. The next strategic change is to implement structural change, involving human resource management to monitor and control talent acquisition and finance division to real-time control finance allocation. After implantation of these strategic changes successfully, it can be guaranteed that SAIDAL can reach the given strategic objectives in no time.

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Hydroxychloroquine: Mechanism of Action

Introduction

Hydroxychloroquine (HCQ), is an aminoquinoline used for the prevention and treatment of uncomplicated malaria (caused by P. falciparum, P. malariae, P. ovale, or P. vivax) in areas where malaria is vulnerable to chloroquine. Other applications may include the treatment of rheumatoid arthritis, lupus, and porphyria cutanea tarda. It is taken by mouth. HCQ is being investigated for the prevention and diagnosis of coronavirus disease 2019 (COVID-19) High-quality epidemiological care (Stein, et al., 2000).

The FDA approval for emergency use of hydroxychloroquine and chloroquine in COVID-19 treatment was revoked on 15 June 2020 (FDA.gov, 2020).

Hydroxychloroquine obtained approval from the FDA on 18 April 1955 (FDA.gov, 1955).

A recent research recorded a COVID-19.10 fatality in the hydroxychloroquine treated population (Chary, et al., 2020).

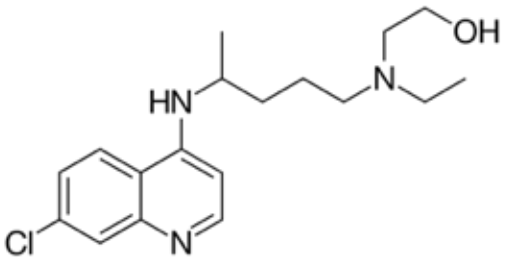

Figure 1. Structure of HCQ

Pharmacodynamics

Hydroxychloroquine affects both lysosomes function and plasmodia in humans. Changing the pH of the lysosomes decreases the low-affinity self-antigen presentation in autoimmune diseases and interferes with plasmodia's ability to proteolyze hemoglobin for its energy needs. Hydroxychloroquine has a long duration of action, as for some indications it might be taken weekly. Hydroxychloroquine can lead to serious hypoglycemia and thus it is recommended that diabetic patients control their blood glucose levels. Hydroxychloroquine in areas where chloroquine resistance has been identified, is not effective against malaria (Wolpin, et al., 2014).

Pharmacokinetics

Absorption

Hydroxychloroquine is bioavailable in 67-74 percent. Bioavailability of the enantiomers R and S did not vary significantly. Following an oral dose of 200 mg, hydroxychloroquine reached a Cmax of 129.6ng / mL with a blood Tmax of 3.26h and a plasma Tmax of 50.3ng / mL with a plasma Tmax of 3.74h. Following intravenous doses of 155 mg and 310 mg, blood Cmax ranged from 1161-2436ng / mL with an average of 1918ng / mL.

Volume of distribution

55,22 L (blood) and 44,257 L (plasma)

Protein binding

In general, hydroxychloroquine is protein-bound in plasma by 50 percent. The hydroxychloroquine S enantiomer is 64 percent plasma bound protein. It is bound to serum albumin by 50

percent and alpha-1-acid glycoprotein by 29 percent. The R enantiomer is plasma-bound protein by 37 percent. It is linked to serum albumin by 29 percent and alpha-1-acid glycoprotein by 41 percent.

Metabolism

Hydroxychloroquine is N-dealkylated by CYP3A4 to the active metabolite called desethylhydroxychloroquine and to the inactive metabolites desethylchloroquine and bidesethylchloroquine. The main metabolite is desethylhydroxychloroquine.

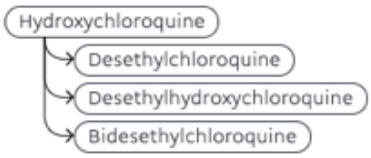

Figure 2. HCQ metabolites. Source (drugbank.ca)

Route of elimination

40-50 percent of hydroxychloroquine is excreted by the kidney, while only 16-21 percent of the dose is excreted in the urine as an unchanged drug. 5 percent of the dose is sloughed off in the skin and 24-25 percent is eliminated in the feces.

Half-life

Oral hydroxychloroquine has a half-life of 3-4 hours of absorption. A 200 mg oral hydroxychloroquine dose has a half-life of 22.4 days in blood, and 123.5 days in the plasma. A 155 mg dose intravenous (iv) has a half-life of 40 days.

Clearance

96mL/min

Mechanism of Action

The precise mechanism of action of HCQ is unknown. Hydroxychloroquine has been shown to accumulate in malaria parasite lysosomes, elevating the pH of the vacuole. This behavior interferes with the ability of the parasite to proteolyze hemoglobin, preventing its normal growth and replication. Hydroxychloroquine may also interfere with the action of parasitic heme polymerase, causing the toxic substance beta-hematin to accumulate.

Hydroxychloroquine concentration in human organelles often raises their pH, which inhibits the processing of antigens, prevents dimerization of the alpha and beta chains of the major histocompatibility complex (MHC) class II, inhibits the cell’s antigen presentation and decreases the inflammatory response. High pH in the vesicles may alter the recycling of MHC complexes to present only the high-affinity complexes on the surface of the cells. Self-peptides bind to low-affinity MHC complexes and therefore are less likely to be exposed to autoimmune T cells. Hydroxychloroquine also lowers cytokine releases, such as interleukin-1 and tumor necrosis factor, probably by Toll-like receptor inhibition.

The elevated pH in endosomes prohibits the use of virus particles (such as SARS-CoV and SARS-CoV-2) for fusion and cell entry.

Hydroxychloroquine also blocks the terminal glycosylation of ACE2, the receptor that targets SARS-CoV and SARS-CoV-2 for cell entry. ACE2 which is not in the glycosylated state may interact less efficiently with the spike protein SARS-CoV-2, further inhibiting viral entry.

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Top 4 Physical Exercises That Burn the Most Calories

There are several physical exercises that help burn calories quickly, the amount of calories you will burn depend on the duration of the exercise, pace, intensity, and your BMI.

#1 Running

According to Healthline, running is the most effective way to burn 652 – 965 calories per hour if your weight ranges between 125 – 185 lbs.

#2 High-knee running

Calories burned in 30 minutes: 240 to 355.5
https://youtu.be/QPfOZ0e30xg

#3 Butt kicks

Calories burned in 30 minutes: 240 to 355.5

https://youtu.be/kRR1i9btd_w

#4 Mountain climbers

Calories burned in 30 minutes: 240 to 355.5

https://youtu.be/QMc0VQNZKvw

The Effectiveness of "Slimming Probiotics"

For several months, the link between the intestinal microbiota and body weight has been the subject of numerous studies and scientific papers. It is now recognized that an imbalance in

the intestinal bacterial flora promotes weight gain. Conversely, rebalancing the intestinal microbiota using probiotics appears to be a promising and natural way to accelerate weight loss. As such, a research team from the Institute of Nutrition in Rio de Janeiro has just demonstrated the effectiveness of several slimming probiotics, including the Lactobacillus gasseri strain.

According to the definition of the World Health Organization (WHO), probiotics are “living microorganisms that, when ingested in sufficient quantities, exert beneficial effects on health”. Research on this subject has identified thousands of different probiotics, of which the best known bacterial strains belong to the genera Bifidobacterium and Lactobacillus.

Lactobacillus gasseri Probiotic and Weight loss

The weight-loss potential of the probiotic strain Lactobacillus gasseri has been confirmed by a systematic review of the scientific literature (Million et al., 2012) To confirm the effectiveness of this slimming probiotic, more than 1,500 publications were selected and reviewed. At the end of the analysis, fourteen randomized double-blind studies were selected to limit the risk of biased results. Among them are studies conducted on animal models and clinical trials in humans. Regardless of the method used, these studies concluded that weight loss was observed in may individuals who have received Lactobacillus gasseri supplements, in particular, a decrease in body mass index (BMI). These positive results have led to the development of supplements based on Lactobacillus gasseri. A European pioneer in nutritional supplementation, Super Smart has been marketing this slimming probiotic for many years in the form of DR capsules Caps™. Gastro-resistant, these capsules protect the probiotics from the acids contained

in the stomach and ensure their release in the intestines.

The effectiveness of the slimming probiotic Lactobacillus gasseri is currently arousing great interest in the scientific community. And with good reason, since this bacterial strain appears to be a natural solution, safe and without side effects, to lose weight, regain a healthy weight and fight overweight. The preventive use of the probiotic strain Lactobacillus gasseri is supported by several positive scientific results. Published in the Journal of Nutritional Science, a study has confirmed and deepened the benefits of this bacterial strain within the body. In addition to its slimming effects, it helps strengthen the intestinal barrier and counteracts inflammation of adipose tissue, an inflammatory reaction involved in the occurrence of certain metabolic disorders.

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